Clinical Lectures
ON
BLOODLESS OPERATING,
AND
BLOODLESS OPERATIONS AS ILLUSTRATED BY THE USE OF THE GALVANIC CAUTERY.

Delivered in Guy's Hospital,

BY THOMAS BRYANT, F.R.C.S.,
SURGEON TO THE HOSPITAL.

GENTLEMEN,—We have of late heard much of bloodless operations, and you have seen in the operating theatre how limbs may be removed, joints excised, and dead bone taken away from the extremities with the immediate loss of as little blood as if the operations had been performed upon a dead subject. You are aware, moreover, that the method by which those operations have been performed is the one known as that of Professor Esmarch. I must tell you, however, that the principle of this practice is not new; that it has been acted upon in this hospital for many years, more particularly by Mr. Hilton; that in Edinburgh it has not been unknown for a long period; and that in Italy it has been practised by Dr. Silvestri of Vicenza, and Professor Vanzetti of Padua, in a way almost identical to that more recently brought before our notice by Esmarch, and introduced into London practice by Mr. MacCormac. The extension of the principle and the exact mode of its application contain, however, much novelty, and Professor Esmarch has made it a practical success.

The plan has its advantages as well as disadvantages, and it is not yet proved that the former outweigh the latter. More experience of its use is wanted before any decided opinion upon its merits can be given. That the plan is very acceptable to the operating surgeon there can be no question, for it enables him to perform all his duties with greater calmness, deliberation, and cleanliness than he could before; and I have no doubt that, in exceptional cases, it will enable him to save limbs, wholly or in part, which might otherwise have been sacrificed; for by this method a joint or part may be fully explored and partially dissected before an attempt at its removal is made. The surgeon must, however, guard himself against cutting too freely in the bloodless tissues. He must be careful not to put aside the cautious use of the scalpel when employing it in the neighbourhood of important vessels and nerves; he must not allow the facility for cutting in bloodless parts to tempt him to do more than the exigencies of the case demand. He must, moreover, educate his eye to recognise bloodless healthy bone and soft tissues from the diseased; for I need hardly say that the appearances of all parts, particularly bone, are greatly changed when deprived of blood.

There are, however, associated with the method under consideration some disadvantages of no mean importance, and the greatest of these is the prolonged and general oozing of blood from the tissues which invariably follows the removal of the tourniquet. I do not mean the arterial bleeding that takes place from the arteries, large or small, for such can be effectually controlled by well-applied torsion, but I mean the capillary oozing of blood from the general surface of the wound; the soft parts, as it were, on the removal of the constricting band, filling like a sponge and oozing blood in a passive way; the capillaries, that have been entirely deprived of their blood by the elastic pressure, apparently losing their contractile power for a time and in this way giving rise to a passive hæmorrhage; this general oozing converting what might have been a bloodless operation, so far as the mere cutting was concerned, into an operation as a whole of a totally different character, and tempting me to think that it would be wise to describe the operations performed by Esmarch's plan as examples of bloodless operating, reserving the term bloodless operations to those performed without the loss of blood from the beginning to the end.

How far, again, this secondary oozing of blood may interfere with or prevent the immediate or primary union of a wound is not yet proved. That it must do so in a degree is palpable to all, for you must know that oozing to any extent between the edges of a wound or between flaps necessarily prevents rapid repair.

Care is likewise called for in the application of the elastic band, for too tight compression must do harm. Langenbeck has already recorded three instances in which, by this pressure applied to the upper extremity, some paralysis of the median nerve followed.

In aged subjects, and in others in whom the vessels are diseased, the practice does not commend itself, for in such the complete obstruction to the flow of blood into the tissues is likely to be followed by sloughing or want of action. The same result is likely to arise when the carbolic-acid spray is employed after Lister's system; the influence of the spray upon bloodless tissues having an evil tendency,—at least so it has appeared from some cases which have occurred in the practice of my colleagues.

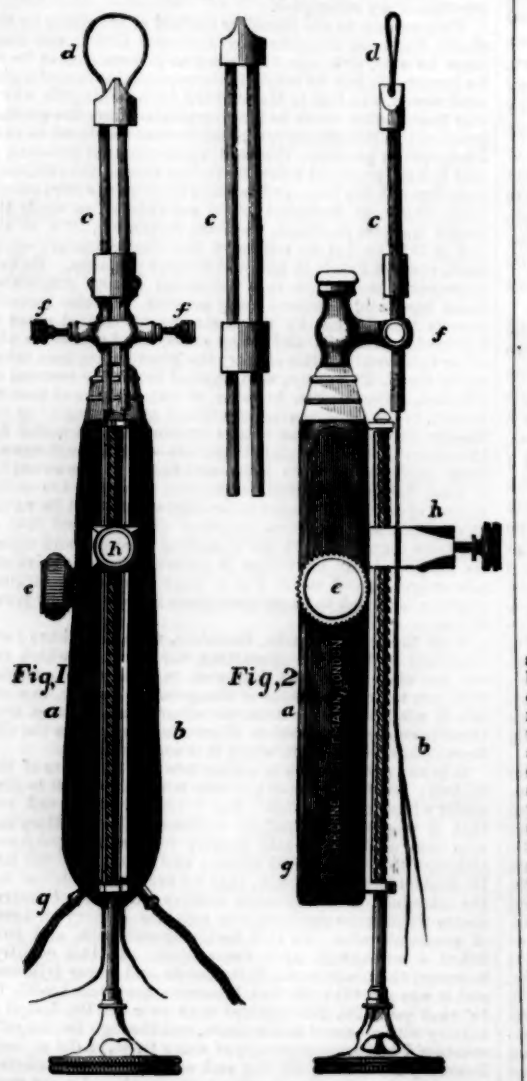
With respect to the bloodless method of operating by the elastic band, as suggested by Professor Dittel, one word must be said, although that word at present cannot be in its favour. It had its origin in the remarkable case of a girl, aged eleven, who died in March, 1872, from meningitis, which was found after death to have originated from the gradual pressure of a thin elastic cord, such as that employed to keep a hair-net in position; this cord, by its constant pressure, is said to have produced a circular furrow around the skull-cap, even through the bone, and in parts through the dura mater. From this case Professor Dittel was induced to apply the elastic ligature to others, and from November, 1872, to the end of 1873 he has by means of the elastic ligature cured nævi, cases of fistula in ano, and sinuous passages. He has, moreover, removed by it a cancerous breast, amputated three legs, and ligatured many arteries. He also recently reports that he has by the same means treated cases of hydrocele, phimosis, and many examples of cancerous and other tumours. In this country the practice has been taken up by Sir H. Thompson, who applied it for the removal of a breast. The success, however, of the case, as at present known, is not encouraging, the breast not coming away for twenty-eight days. The elastic ligature may be useful for the removal of pedunculated tumours—and for such cases I have employed it since 1862—and for some rare examples of anal fistula and allied cases; but for what are called capital operations I cannot at present understand its value. It possesses also one grave practical objection, and that is the fetor connected with the sloughing process; and unless its advocates can show that it possesses some equivalent advantages it will never find a place in ordinary surgical practice, although in exceptional cases it may possibly prove of use.

With these few remarks, therefore, upon what have been described as bloodless operations, the merits of which are not yet clear or proved, I propose to pass on to consider with you the clinical value of the galvanic cautery, to show how it really possesses what the other plans claim—a true bloodless character,—and to illustrate by examples the different classes of cases in which it is applicable.

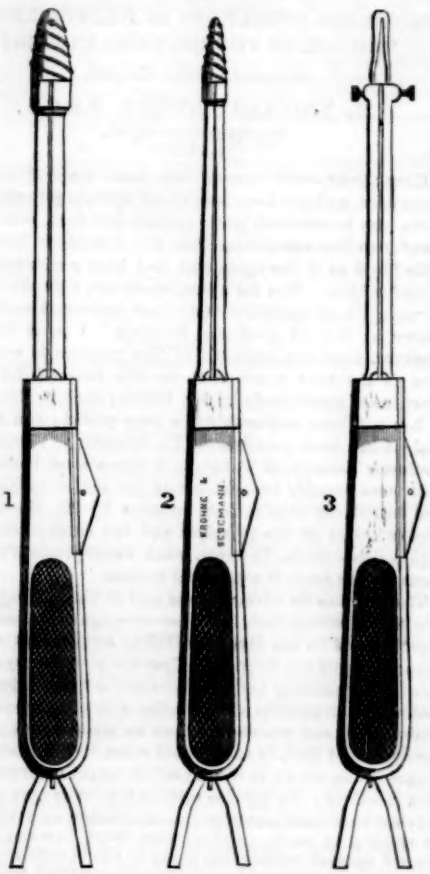
It is not my intention to go far into the literature of the subject; for if I do I may get into trouble, and fail to give credit where credit is due. But I feel bound to tell you that it was Mr. Marshall, of University College Hospital, who first used a galvanic cautery for surgical purposes, although to a very limited extent; and that it is to the late Dr. Middeldorpf, of Breslau, that we are really indebted for the introduction of a splendid battery, and a set of instruments which have rendered the galvanic cautery an agent of practical value. In 1854 he introduced both, and published a monograph upon the subject. In this country, however, the practice was little known and never followed, and it was not till 1868 that I became acquainted with it. In that year Dr. Middeldorpf sent over to Dr. Beigel a battery with a case of instruments, and through Dr. Beigel's courtesy I had an opportunity of using them. I did so from February 26th, 1868, till the end of May, having selected from my out-patients at Guy's a large number of cases upon which to employ it. From the experience thus acquired I became so convinced of the value of the instrument that I

persuaded our treasurer at Guy's to provide one for the hospital, and since that time it has been in active use. At my suggestion, Messrs. Krohne and Sesemann, who supplied the one we have at Guy's, obtained a second for themselves, which they work for private purposes; and in this way the galvanic cautery has been introduced into London practice.

There is no necessity for me to describe to you young men the battery or the instruments that are in use. You have seen them employed too often in this theatre, for a vast variety of cases, not to know all about them: not to know that the battery is a very powerful one, and that when in good working order it will heat the largest cautery we have and keep it heated—either at a white, red, or black heat; the different degrees of heat being regulated by the number of cells employed—many cells representing a high temperature, a less number a moderate one. You know, also, that the number of cells required is much determined by the thickness of the wire or cautery-iron—a thin wire, or small cautery being more readily heated, and kept heated, than a thick wire or large cautery.



The drawings I hand round represent the instruments I now employ. (See figures.) The battery is a Bunsen's. They are not quite like those you have seen me use in this hospital, but they are of equal if not of greater value, and the battery is more portable. They are those which Mr. Krohne has for private use, and which he has been led to make. They represent the improvements which a long practical acquaintance with the instruments has produced.



I trust I shall be able to show to you that it is with such a battery as this, and with such instruments, that the true bloodless operations are to be performed; and that, in comparison with this method, all other so-called bloodless methods are delusions. But, in saying this, I must impress upon you that to secure this result much care is called for and much discretion. The battery must be in good working order, and the instruments complete and whole: no makeshift will suffice in any way. If the battery does not work well, the required heat will not be maintained; if the instruments are imperfect, some break in the galvanic current may take place, and thus failure must ensue. As a matter of precaution, before operating, the surgeon should, therefore, test the battery and instruments that are to be employed, and in this way save trouble and prevent disappointment or, possibly, failure.

I will now proceed to consider the different classes of cases to which the cautery is applicable; admitting at once the charm the practice possesses, and understanding to a degree how Dr. Middeldorpf, its originator, was disposed to apply it to almost every branch of surgery. I propose to consider its use under different headings, and to demonstrate its value by brief records of cases. I shall commence with the operations upon the tongue, penis, and anus; and pass on to those for the removal of tumours, the destruction of cancers, and the cure of lupus; winding up my observations upon the subject by showing its value in the treatment of nævi.

ON OPERATIONS ON THE TONGUE.

There are no operations of importance that the surgeon has to perform which have been more benefited and simplified by the introduction of the galvanic cautery than those upon the tongue; for there are none in which, without its use, hæmorrhage is more troublesome or dangerous, and there are none, with its use, which more satisfactorily illustrates its bloodless character. Indeed, before the introduction of the galvanic cautery or écraseur, operations on the tongue were very rarely performed. During my student's career I can recall but very few instances in which this form of operation was undertaken; and I well remember even so bold a surgeon as the late Mr. Aston Key asserting that he never undertook such a case if he could avoid it.

At the present period, however, a different tale has to be recorded; for, at most hospitals, operations on the tongue are of common occurrence—at our own I may safely say that they are much looked after; and the reason for this great change in practice is, doubtless, to be found in the improved means we have at hand for the performance of the operation, more particularly the introduction of the écraseur wire and galvanic cautery. For by the use of such instruments, carefully employed, no fear of bleeding need disturb the mind of the operator; and what was formerly a very serious measure has become comparatively a simple one.

Operations on the tongue are mostly called for on account of cancer; and, when this affection exists, the sooner it is removed the better, for there are few, if any, local cancers that are the cause of more local distress, if left alone, than that under consideration, and there are few operations for cancer that give greater comfort than those upon the tongue.

How far the removal of the local disease tends to prolong life is a question as open in this as in all other operations for cancer. But that it does so in some cases is undoubted, for in my own practice patients are now alive and well upon whom I respectively operated three and a half, two and a half, and one and a half years ago; and many have been the cases in which a long immunity from the local affection might be recorded. In some, indeed, no return of the local affection ever took place, the fatal result being produced by the rapid development of the cancerous affection in the cervical glands; and under such circumstances surely a successful result must be recorded, for the death from cancer of the tongue is as distressing as any case can be, whereas a death from cancer of the glands is usually a painless one.

The following brief notes of cases will illustrate some of these points, and the cases which will be brought before your notice as we proceed will illustrate the others. One of the earliest cases in which I used the cautery for the removal of a cancer of the tongue was the following:—

CASE 1. *Cancer of the tongue; removal by cautery; immunity from the disease for eighteen months; death from phthisis.*—On Feb. 25th, 1869, I was asked by Mr. Roper, of Croydon, to see Mr. H. J——, aged forty-two, who had a cancer of the tongue. It had been coming for about four months, was situated on the right side, and was of the size of a large nut. I removed it by the galvanic écraseur, and not a drop of blood was lost. A rapid recovery followed, and no return of the disease took place.

Mr. Roper tells me that this gentleman died eighteen months after the operation from phthisis. The fact, however, that no return of the local disease took place for eighteen months is worth noting.

CASE 2. *Epithelioma of the tongue of two years' standing; removal of the disease by the galvanic cautery; recovery; no return.*—On Oct. 14th, 1871, I saw, with Dr. B. W. Richardson, a gentleman aged sixty-three, who had an epithelioma of the tongue, which had been growing for two years; it was about the size of a nut, and was placed near the tip of the organ; it interfered vastly with speech, as well as with mastication. I removed the disease by means of the galvanic cautery, used as an écraseur, without the loss of any blood; and a steady convalescence followed.

I saw this gentleman on Jan. 11th, 1874, and he was quite well; the cicatrix on the tongue was soft and healthy, and no signs of the disease could be made out. In this case, therefore, no return of the disease has taken place for two years and a quarter after its removal.

CASE 3. *Cancer of the tongue; repeated removal by the knife; return of the disease; removal by the galvanic cautery; no return of the disease.*—In May, 1872, Mr. G——, of Melton Mowbray, consulted me, by the advice of Mr. Willan, of that place, for a cancer of the tongue. Within two years he had had several operations performed upon the part, without any permanent benefit; and when I saw him a cancerous tumour existed near the frænum the size of a small nut. On May 23rd, 1872, I removed this tumour, taking great care to isolate it by passing my pins well beneath its base. By means of the wire of the galvanic cautery the tumour was then removed, without the loss of a drop of blood, and a rapid recovery followed.

I saw this patient in November, 1873, and he was quite well; that is to say, no return of the disease had taken place for one year and a half after the operation.

The last case of this series that I propose to give you is probably the best. It is as follows:—

CASE 4. *Cancer of the tongue in a man aged seventy; removal of the disease; no return three years and a half subsequently.*—In October, 1873, Henry S——, aged seventy, a patient who had been under my care, at Guy's, in May, 1870, called upon me to show me his mouth and what remained of his tongue. He had had a cancer of the organ when last under my care; and in June, 1870, it was removed, with the anterior two-thirds of the tongue. He rapidly recovered after the operation, and has had no return. The stump of the tongue, when I saw him, was perfectly healthy. The cicatrix was soft, and the man could talk as plainly without the tongue as with it. In this case, therefore, three years and a half have passed after the removal of the tongue for cancer, and no return has occurred.

These cases are therefore quite enough to justify the operation of removal of the tongue for cancer.

With these brief observations upon cancer of the tongue, I will now proceed to consider the operation for its removal, and will say again what I have said before, that, of all ways, the removal of the tongue by the galvanic écraseur is the one to be adopted. I lay emphasis upon this opinion, not only because I believe it will be endorsed by every surgeon who has had any experience with the galvanic écraseur, but because at no very distant date a learned teacher of surgery in this metropolis, in a published lecture upon cancer of the tongue, went so far in an opposite direction as to say that, "to remove the disease, the least painful, most manageable, and most effective plan is no doubt by the application of the knife or scissors." In his experience this opinion was doubtless correct; but such an opinion, I venture to suggest, could only have been given in ignorance of the value of the galvanic or even of the wire écraseur.

The operation.—For the removal of a cancerous nodule of the tongue, or of a cancerous tongue wholly or in part, the first thing a surgeon has to do is to isolate the part to be removed; and this can usually be effected by the introduction of long pins, ivory pegs, or curved needles in handles beneath the base of the growth, in the way I have illustrated in my work on the Practice of Surgery, page 262; and in doing this the surgeon had better go wide of the disease. Having isolated the growth by this means, fixed the mouth open by a gag, and had the tongue drawn forward as far as possible, either by means of tongue forceps or, what is far better, a whipcord ligature passed through the tip of the organ, the loop of the galvanic écraseur is to be passed round the base of the disease behind the pins, and gradually tightened; the connexion between the poles of the battery being made as soon as the wire loop has been adjusted, but not before. The process of tightening and cauterising may then be carried out; and, when performed successfully, the part to be removed will quickly fall off, without the loss of a drop of blood. In this process of tightening and cauterising much care is called for. In the first place, the wire that is employed should be thick or twisted. I believe the twisted platinum wire is better than the thick. This wire should not be heated beyond a red heat, and the redness ought to be of a dull kind. But, above all, the process of tightening should be very slowly performed, the wire of the écraseur being screwed home only as it becomes loose by cutting through the tissues; any force may break it, and thus give rise to difficulties, or cut through the tissues too rapidly, and give rise to bleeding. Whenever bleeding follows the operation that has been described it is from one of two things—the wire

cautery has been used at too great a temperature, or has been screwed up too rapidly. The surgeon had better take a few minutes longer at his operation than fail in obtaining its good effects. The following cases will illustrate many of these points:—

CASE 5. *Epithelioma of the tongue; removal by galvanic cautery écraseur; cured.* (Reported by Mr. Rich. Bevan.)—Mary L——, a widow, aged sixty, was admitted into Lydia ward on the 30th of April, 1873, with a large ulcer with indurated edges, extending from the tip along the left side of the tongue about two inches and a half. It was sore, and caused considerable pain in talking and swallowing. There were no enlarged glands. About twelve months previously she first noticed her tongue was a little sore on the left side. She consulted a surgeon, who cauterised it; but it gradually increased, and got worse, becoming very sore and hot, preventing her from sleeping at night. Her family history appeared to have been good, there being no trace whatever of cancer. She has had bad teeth for years; and thinks that at the outset a tooth scratched or indented her tongue.

On the 13th of May the tongue was removed by two wires and electric cautery, the double wire being first passed through the centre of the tongue by a needle: one wire divided the posterior part of the diseased portion, and the second the median half. The operation was quite bloodless.

14th.—There was no hæmorrhage. The tongue was a little swollen. Permanganate of potash solution was used.

15th.—The tongue was much swollen, and there was considerable discharge; but she was able to swallow fluids.

23rd.—All the parts seemed granulating healthily.

28th.—Swelling had gone down considerably; but she had not attempted to take solids.

On the 31st she could speak plainly; the tongue is not so painful when she talks as when she was admitted, and she can eat solid food.

She left the hospital on the 2nd of June.

July 28th.—Patient came to the hospital well, having good health since she left; she can speak well, and eat without inconvenience, having free movement of the remains of her tongue.

On December, 1873, the patient was still well.

CASE 6. *Ulcer on the tongue; epithelioma; removal of the apex of the tongue by the galvanic cautery; cure.* (Reported by Mr. C. H. Hayes.)—Wm. E——, a tailor, aged fifty-three, was admitted into Job ward on the 24th August, 1873, with a small ulcer on the tip of his tongue, about the size of a threepenny-piece; its edges were raised, but not everted; the surface was excavated and covered by a yellowish slough; there was no discharge from it, and no pain except when a hard substance touched it. There was also a hardened spot, the size of a pea, at the anterior part of the median raphe. The man had noticed the latter, which appeared four months before as a small ulcer, and burnt it with caustic; it healed, but another appeared at the tip of the tongue, and gradually increased in size. When a young man he had chancres, and lately had been troubled with asthma and bronchitis; but with this exception he had been healthy. He had been a great smoker, generally using clay pipes. His family history was good. He had no swollen glands, but was very subject to sore-throat. He was ordered iodide of potassium three times a day.

The patient left the hospital on the 29th August, but was readmitted on the 2nd September, when the tip of the tongue was removed with the cautery. Two needles were first passed through the tongue—one vertically, the other transversely; the wire was then passed round them, and all the tongue anterior to the needles was removed. The patient, who had been operated upon without chloroform, walked to his bed; he was ordered ice to suck.

Sept. 3rd.—He slept as well as usual; temperature 99°. His tongue quivered, but ice quieted it and kept off pain. He was up two days later enjoying his dinner.

8th.—His tongue was white and painful in the night. He had more ice, and left in the course of the day.

Nov. 12th, 1873.—Still quite well.

CASE 7. *Epithelial cancer of the tongue, following removal of epithelial cancer of the lip nine years before; removal by the galvanic cautery; secondary hæmorrhage; cure.* (Reported by Mr. Kinders.) — G. M——, a shoemaker, aged fifty, was admitted into Guy's Hospital on June 5th, 1870, under Mr. Bryant's care, for cancer beneath the tongue. It commenced four months before as a small white speck, which has grown gradually since. On admission a cancerous tumour the size of a cobnut was seen occupying the under surface of the tongue near the frænum; it could be isolated. This patient had had a cancer of the lower lip excised *nine years before* by Mr. Bryant.

On June 18th Mr. Bryant removed the cancer by means of the galvanic écraseur. He first isolated the growth by means of pins passed beneath its base, and then removed it by encircling it with platinum wire looped beneath the pins, screwing the wire home, heated by means of the galvanic cautery, with the écraseur, the screwing process being slowly performed. No bleeding occurred at the time, but on the fourth day, when the eschar separated, some took place; it was soon stopped, however, by ice. A steady convalescence followed, and the man left the hospital, cured, on July 21st, able to speak and eat without discomfort.

Remarks.—The case just quoted is full of interest, and illustrates two important points: the first being that a cancer of the lip may be removed, and the patient have no return in the part for at least nine years; and the second, that a cancer of the tongue may appear as an independent growth in a subject who has had a like growth in another part. The first point illustrated by the case gave much encouragement in the treatment of the second cancer, and leads us to hope that the long immunity from the disease that followed the operation on the lip may attend that upon the tongue, and that a permanently successful result may be secured. The operation performed upon the tongue was the one I have already described, and was a success. The bleeding that took place when the eschar came away must be regarded as an accident that occurs in a small proportion of the cases operated upon, whether by the cautery or any other means. It may, however, be usually stopped by the use of ice, as in the last case. In exceptional instances the application of the perchloride of iron may be called for, as illustrated by the next recorded example; and in still more rare instances a ligature may be required to the lingual artery or arteries. I have known the common carotid artery to be tied for hæmorrhage coming on under these circumstances, but I unhesitatingly condemn the practice; it ought only to be entertained when all other means have failed to arrest the bleeding.

CASE 8. *Epithelioma of the tongue; removal of disease by galvanic cautery; hæmorrhage on the ninth day; recovery.* (Reported by Mr. Arthur B. Crowther.)—Eliza R——, aged sixty-eight, a woman who had been married three times without having had children, was admitted into Lydia ward on the 14th of August, 1872, with a sore on the left side of the tongue about the size of half a walnut, having an open cavity of half an inch in the deepest part, from which a white flaky pus exuded. The granulations in the interior were paler than the surrounding surface of the tongue. The edges of the sore were swollen and indurated, the breath was very fetid, and there was a good deal of shooting and dull aching pain throughout the whole of the left side of the head. She had lost flesh since it first appeared, and was much weaker, but was able to manage her food well. There was no enlargement in the submaxillary region. It appeared she had generally enjoyed good health except in her first husband's time, when shortly after marriage her throat and tonsils became inflamed and discharged a great deal. She consulted a medical man, who applied caustic to the ulcerated places. Her throat got better in six months, having used a gargle and taken medicine all the time. Three months before admission she noticed a little scratch, white in appearance and hard to feel, over the lateral surface and middle of the left side of the tongue, nearly a quarter of an inch long, which gradually became more painful and increased in size. It soon opened and discharged. About this time the stumps of two back molars of the upper jaw on this side seemed to give pain, and their roughened edges caused irritation to the tongue in the region of the sore. These were removed and she experienced much relief. The sore still gradually increased, and discharged more. She used alum lotion, and also borax and honey, and at last obtained admission to Guy's Hospital.

Aug. 24th.—Two needles were passed across and beneath the base of the ulcer; a loop of platinum wire was then passed beneath the needles, and screwed up with the écraseur; the wire was heated with the battery. In seven minutes the

portion was separated; there was no bleeding—only a very little oozing.

28th.—The surface over which the cautery was applied was covered with a greenish-yellow material having a very fetid smell. She had a little pain in the submaxillary region, where a slight swelling could be felt; the stump of the tongue had been very much swollen the first day or two after the operation, but that was gradually subsiding.

Sept. 2nd.—There was some hæmorrhage, which was arrested by tincture of iron. She complained of severe pain up the left side of the face and down into the neck.

7th.—The tongue was clean and pain less. Pulse 84. She ate a little hard food, and was ordered brandy instead of wine.

On the 10th she was seized with severe pain in the chest and left side, accompanied with vomiting, but was relieved after applying warm fomentations. She felt very weak. Pulse 80. The following day, however, she was much better, and got up on the 16th. From this date she got up every day, and was discharged on the 26th, the tongue being quite healed and free from pain; but she sometimes felt a pricking sensation under the submaxillary bone. Her ordinary health was good, but she felt very weak.

In December this patient again presented herself. Her tongue was almost natural, the apex being but slightly drawn towards the left side; the cicatrix was quite healthy, and no signs of glandular enlargement could be made out.

CASE 9. *Epithelioma of the tongue; removal of growth by galvanic cautery; second operation; improved.* (Reported by Mr. W. C. Reed.)—R. H. S—— was admitted into Naaman ward on the 29th June, 1871, having on the under surface of his tongue, a hard, fungating tumour 1½ in. by ¾ in., isolated and separated from his tongue by a well-marked depression. The tumour was of the same colour as the tongue, only marked with white streaks. There was no enlargement of the sublingual or submaxillary glands. The front teeth in both jaws were jagged through the rubbing of the mouthpiece of a pipe; there was also a sharp-pointed stump of second molar in the right upper jaw. He noticed the disease first about three months before, as a small white film, about the size of the top of his little finger; it gradually increased in size, but caused no pain until about three weeks before admission. The patient had suffered for the last ten years from shortness of breathing, bad cough, and profuse expectoration; he had been under medical care, and also an out-patient at the Brompton Consumption Hospital, where he was treated by cough mixture and blisters. His family history was good, no member of his family having suffered from phthisis or cancer. The patient had been in the habit of smoking a pipe with a bone mouthpiece, and used to bite off small pieces, leaving a jagged surface to rub against his tongue.

July 4th.—Chloroform having been administered, the growth was isolated by two pins and removed by the galvanic cautery. The patient was very sick after the operation.

6th.—He stated that his tongue was less sore than before the operation; he could articulate very distinctly, but could not eat solid food.

The following day his tongue bled slightly, and again on the 8th rather considerably, but it was arrested by ice. He then complained of his cough, and was ordered medicine, which relieved him.

11th.—The part burned by the cautery had begun to slough; it was very sore; but two days later it had healed, pain had ceased, and his cough was nearly well.

14th.—The patient left the hospital, his tongue presenting a bifid appearance. He could articulate as plainly as when he came in.

Nov. 17th.—He was readmitted with a recurrence of the disease in his tongue. The stump was apparently healthy, but under the right side from the central point, and corresponding to the second bicuspid and first and second molars, there was a longitudinal fissure ¾ in. deep by ¼ in. wide and 1 in. long. The edges were not everted, but ragged, and the parts overhanging the edges wart-like.

17th.—Chloroform was administered. The soft parts between the tongue and symphysis were divided with a knife and scissors, and the division was completed by means of a wire heated by a galvanic current. The tongue could then be drawn out of the mouth; the base of the ulcer was transfixed by three needles, and the wire loop of the galvanic écraseur passed behind them. This was heated and screwed up, the mass of disease being thus removed. The operation was a bloodless one.

18th.—There was a slight swelling under the lower jaw. There had been but little discharge from his mouth, but he was unable to speak or swallow.

For some few days after this his breath was very fetid, and there was a good deal of discharge, but by the 27th these symptoms had disappeared and the part had nearly healed. He had no pain, and there was little or no constitutional disturbance. He did not take solid food, but he could swallow very well. His speech was rather thick, and only slightly indistinct. He left the hospital on Dec. 2nd. Six months subsequently this patient was still well.

CASE 10. *Epithelioma of the tongue; removal by galvanic écraseur; recovery; death sixteen months after from cancer of glands of neck.* (Reported by Mr. Hicks.)—Wm. M——, aged forty-six, a black man, was admitted into Guy's Hospital, under Mr. Bryant's care, with an extensive cancerous disease of his tongue. It had been growing gradually for twelve years from a small warty growth, which first appeared in the centre of the organ (ichthyosis?). On admission the disease covered the anterior two-thirds of the tongue. There was no glandular enlargement.

On June 13th, 1871, under chloroform, Mr. Bryant removed the whole disease by means of the écraseur of the galvanic cautery. He first drew out the tongue by means of a ligature passed through its apex; and then, with a curved needle, fixed on an handle, with an eye at its point, transfixed the base of the tongue from below backwards and upwards behind the disease. He then threaded the needle through the eye at its point with a double piece of platinum wire, and drew the double wire through the base of the tongue behind the disease. With one piece of the wire he then encircled half the base of the tongue, and divided it with the galvanic écraseur; and, having done this, he treated the other half in the same way. The operation was a bloodless one.

During the operation the second wire broke just before the second half of the tongue was divided; consequently Mr. Bryant completed the operation with the ordinary wire écraseur. In fourteen days the man could speak comfortably; indeed he could articulate every letter far better than he could before the operation, although he had only a very short stump of a tongue. He left the hospital at the end of July, cured.

He reappeared in December, quite well, and highly pleased with the result of the operation.

He was readmitted August 13th, 1872, fourteen months after the operation, with a large cancerous tumour discharging on the left side of the neck. The swelling had appeared five months previously—that is, nine months after the operation. This swelling gradually enlarged till six weeks before admission, when the growth became rapid and the tumour broke, discharging blood and offensive matter. It was a good example of an open medullary cancer involving one side of the neck. The old scar on the tongue was perfect and free from disease. The man lingered till the 25th of October, 1872.

Post-mortem examination.—Cicatrix on the tongue sound. Viscera healthy. Large cancerous tumour involving all the tissues of the neck; the nerves and vessels passed through it. Death from exhaustion.

CASE 11. *Epithelioma of the tongue; removal of a part by wire écraseur; division of jaw; convalescence from operation; erysipelas and death from pyæmia forty-seven days after operation.* (Reported by Mr. W. Brown.)—William H——, a man sixty-four years of age, employed in a law office in Calais, was admitted into Job Ward on May 3rd, 1873. He had lived in France about forty years, and enjoyed good health, with the exception of attacks of rheumatism. About five months before admission he noticed a little lump under the left side of the tongue, which gradually grew. After consulting two medical men in France, who told him nothing serious was the matter, his tongue became more fixed, and he was unable to masticate his food. He was then advised to come to Guy's Hospital. Upon admission and examination of his mouth, his front teeth were represented by stumps only, the anterior bicuspid on the left side of the lower jaw being present. The tip of the tongue looked healthy, except that it was pushed upwards by an ulcer with a thick

base, which extended forwards by the side of the mouth along the floor, at the angle between the tongue and mucous membrane. At the side of the tongue there was a fungous, thickened ulcer, extending directly from the tongue upwards to the dorsum. It bled easily, and the breath was offensive. The bone did not appear thickened, but the glands beneath the jaw were slightly enlarged.

May 9th.—Chloroform having been given, a vertical incision was made in the median line of the lower lip. The jaw was divided with a small hand-saw, and its two halves separated. The growth, which was found closely adherent to the bone, was loosened from its attachments, and the tongue drawn out; two needles were passed deeply under the tongue beneath the posterior border of the growth; a wire écraseur was then applied to the tongue behind the needles; this was screwed up, and the growth removed. There was but little hæmorrhage.

The growth on section showed a deep and extensive infiltration of the muscular structure of the tongue, which the écraseur had only just succeeded in clearing. It was yellowish to the eye and soft, and microscopically it was a good specimen of cancer. The patient was very comfortable after the operation, and slept.

13th.—His face was swollen, but he took food.

15th.—There was some difficulty in swallowing, but very little pain. The following day he was fed through the nose with beef-tea.

21st.—The face was very much swollen and red, but it got better two or three days later. He then complained of pain in his hand, which was a good deal swollen.

June 4th.—There was still a nasty sloughy-looking surface in the mouth on the left side, but he seemed better, and took his food well.

8th.—The swelling on his hand was opened; there was a good deal of suppuration.

13th.—The lower jaw was strapped up to keep it in place.

17th.—There was a swelling below the ear on the left side, which had been coming some days; it was opened. He went on well for three or four days, but on the 24th became worse, and died on the 26th.

Remarks.—I give you this case to show that operations upon the tongue are not free from the risks that attend other operations, and that the dangers of pyæmia are present in all. In the case recorded the blood-poisoning was doubtless secondary to the suppuration in the neck, and that was due to the disease in the mouth, or possibly to the irritation started by the operation. In a collateral way therefore the operation may have been the cause of death. I have given the case to you in detail, as it illustrates many of the difficulties you may have to meet with.

With this case, gentlemen, I shall now close my lecture, and I trust you will think that I have laid before you enough material to enable you to form some definite opinions upon the many points connected with the removal of the tongue for cancer. I trust you will agree with me that the removal of a tongue, wholly or in part, for cancer is a justifiable and a wise surgical proceeding, and that the sooner the operation is performed after the diagnosis of the disease has been made the greater are the prospects of a long immunity from the disease, or a complete cure. I trust also you will coincide with me when I state my confident belief, based upon the material now laid before you, and upon the general experience of the surgeons of this hospital, as seen in its theatre and elsewhere, that on the assumption that a tongue, wholly or in part, is to be removed, "the least painful, most manageable, and most effective plan is no doubt" by the écraseur of the galvanic cautery, and next, if this is not at hand or applicable, by the wire écraseur. That by these means the operations upon the tongue are comparatively simple, and bloodless, and, I am disposed to think, more successful than they are when undertaken by any other means: for with the cautery and écraseur the surgeon has no need to expedite his movements; he can isolate the disease with ease and deliberation; he can satisfy himself before he begins the operation for its removal that the whole tumour is under his control; and, with the caution given, he can guarantee that the whole disease can be removed in a bloodless way.

When we next meet, the use of the galvanic cautery in other affections will claim our attention.

PRACTICAL NOTES ON CUTANEOUS SUBJECTS.

BY TILBURY FOX, M.D. LOND., F.R.C.P.,
PHYSICIAN TO THE DEPARTMENT FOR SKIN DISEASES IN UNIVERSITY COLLEGE HOSPITAL.

VI.—SUCCESSFUL TREATMENT OF PITYRIASIS RUBRA.

PITYRIASIS RUBRA (general dermatitis) is said by many dermatologists to be incurable. If treated upon correct principles, I find it to be very amenable to remedies in many cases. The following is a case in point:—

W. B——, aged fifty-two, came to University College Hospital on the 28th September, 1872, stating that he had been under a club doctor for two months with his disease, and was rapidly getting worse. He said that he had always enjoyed good health, save that he had had the gout on and off, badly, for fourteen years. He admitted "taking a little," by which it appears he meant five or six glasses of ale or gin-and-water a day. Has passed "stones" per urethram, the size of the smallest pea. His urine is habitually red, thick, and scanty.

The skin affection began two months ago—namely, in July, 1872—by little red scaly spots on the arms and legs. Other spots then appeared quickly over the body. These speedily enlarged, and invaded the whole of the body within ten days or so. The body was, in fact, reddened, and threw off scales and large flakes. The head was red and scurfy. The face and the palms of the hands were apparently the only parts not affected.

There can be no doubt that the disease was typical pityriasis rubra, though it was termed by the doctor psoriasis. The urine became scanty at the same time.

Sept. 28th.—When I first saw the patient he had the general aspect of a man with pityriasis rubra. The whole skin was very hyperæmic, but there was no thickening of the derma, as is observed always in well-marked and certainly general psoriasis. The blood could be squeezed out of the skin, which had a dry, yellowish look, and felt harsh; but the surface was covered over with lamellar scales, exactly as one sees in pityriasis rubra; they were not heaped up, not smallish, imbricated, and of silvery aspect as in psoriasis; they were freely shed—as much as two handfuls in quantity, during the night, for instance. But there was more than this. The legs were enormously swollen and tense; they were markedly œdematous; and this, together with the extreme pallor or semi-sallow aspect and puffiness of the face, pain in the back, and scanty supply of urine, gave one the idea that the man was the subject of Bright's disease; but on examining the urine, it was found to be tolerably healthy.

Remarks.—This case was clearly one of pityriasis rubra—viz., hyperæmia of the skin and exfoliation of the cuticle. It began like, and ran the usual course of, pityriasis rubra, involving the whole surface from head to foot in a very short time, except that the disease got well before the lapse of a very long time. And it is especially in regard to the success of the therapeutics adopted that I wish to call attention. In the first place, I have to observe that the conditions were favourable to successful treatment—though the disease is said by some to be incurable,—because the case came under observation at an early date, before the hyperæmic state of skin had existed any length of time, so as to have given rise to secondary alteration, such as infiltration into the textures, and the like.

The case seemed to me to be exactly one in which the free use of diuretics was called for. It is an established rule in renal therapeutics to stimulate the skin to increased action in cases where the kidneys are congested, or in other conditions in which it is desirable that they should be given rest from work. In the case of a hyperæmic state of skin, where this hyperæmia is not removable by local remedies, and where it is extensive, it is likewise desirable to stimulate the kidneys to increased activity, to relieve the skin of its work—to give it rest. In the case under notice the man was actually making much less than an average amount of urine; hence conjoined to his hyperæmic skin was a general puffiness or semi-œdema of his skin, especially his legs, as before stated. The patient began to take a diuretic mixture, composed of spirit of juniper, one drachm; acetate of

potash, half a drachm; bicarbonate of potash, half a drachm; and infusion of calumba, one ounce, for each dose, three times a day. He continued thus, rubbing in simply oil to his skin, from Sept. 28th to Nov. 30th, 1872, taking also four vapour baths towards the end of this interval, as the skin began to recover its normal state. His kidneys acted well, the swellings of his legs subsided, and his skin gradually became less red and scaly. On Dec. 7th he began to take tincture of the perchloride of iron in fifteen-minim doses three times a day, and on Jan. 25th, 1873, was pronounced well.

This is now the fifth case of cure of pityriasis rubra which I have had under this plan of getting the kidneys to do extra work so as to relieve the skin, and give it rest, whilst it is soothed by oily inunction, this being followed up by the exhibition internally of perchloride of iron, which acts as an astringent to the weakened cutaneous vessels.

ON THE TREATMENT OF TRANSVERSE FRACTURES OF THE PATELLA.

BY C. J. MANNING,
LATE HOUSE-SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

EVERYONE who has witnessed the results of the ordinary treatment of transverse fractures of the patella will admit that they are unsatisfactory in several respects. The union of the fragments is almost always fibrous, whereas there is no pathological reason why it should not be, as in the case of other fractures, osseous. In consequence of this non-osseous union the limb is weakened, the power of extension is impaired, the gait becomes vacillating, the joint less protected, the accident liable to recur, and the sound patella is in great danger of being fractured on account of the increased strain which is necessarily put upon it.

On considering the matter some time ago, I came to the conclusion that these unsatisfactory results were due to the facts that—(1) the bandages, straps, &c., as ordinarily employed, do not retain the fragments in apposition for a sufficiently long time; (2) that the circulation in the upper fragment is impeded by the pressure on the arterial arch along the upper edge of the bone; and (3) that the muscles causing the displacement are not efficiently controlled. Thus the conditions regulating the union of fractures are violated. It seemed to me that a method of treatment could be devised by which these ill results might be avoided, and it so happened that a case was brought to University College Hospital last November in which it was impossible to apply the usual apparatus, in consequence of the upper fragment being so small that no bandage would hold it in place. I was thus compelled to employ some other means in order to accomplish my object. The plan which I ultimately adopted having yielded a very satisfactory result, I venture to publish an account of the case, with a detailed description of the apparatus I employed. At the same time I venture to express the opinion that this method of treatment will be useful, not only in those cases in which the upper fragment is too small to afford purchase for a bandage, but also in all ordinary transverse fractures of the patella.

J. H——, aged fifty-seven, a stout, healthy, and muscular man, was admitted into the hospital on the evening of Nov. 22nd, 1873, with the history and signs of transverse fracture of the patella. The accident had been caused by a fall on the pavement. On examination, the fragments, as the limb lay quietly on the bed, were found to be an inch apart, while the upper one was, as has been just stated, so small that a bandage or strap applied in the usual way slipped over it, and caused still further separation. I therefore put up the limb in the apparatus of which the following is a description:—It consists of a straight wooden back splint, a little wider than the knee-joint, long enough to reach from the sole of the foot to the gluteal fold, and provided at its lower end with a foot-piece (A, Fig. 1). At the junction of the lower and middle thirds is a transverse slit, one inch and a half long, cut obliquely from above downwards (B). Some strips of stout strapping, about two inches wide, and long enough to encircle the thigh and overlap a few inches, are stitched to a band of strong calico (D), a little narrower than the slit in the splint. The free end of this band is passed through the slit, so that the strips of plaster lie on the upper surface of the splint. A piece of wood, of the comparative length and shape represented at E, is secured to the splint by means of a strip of bandage passed through two holes at its lower end; and a similar piece of wood is stitched in a loop at the bottom of the calico band, so that when the splint is adjusted these pieces of wood may be five or six inches apart.

FIG. 1.

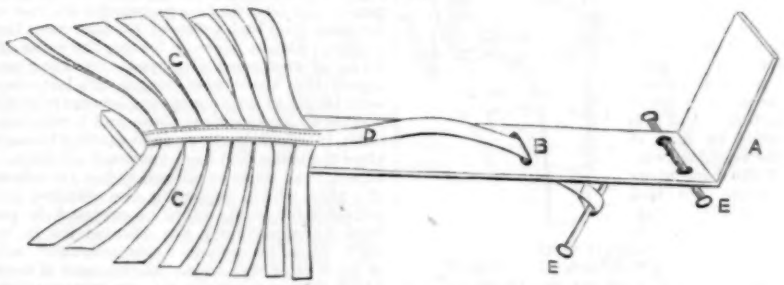
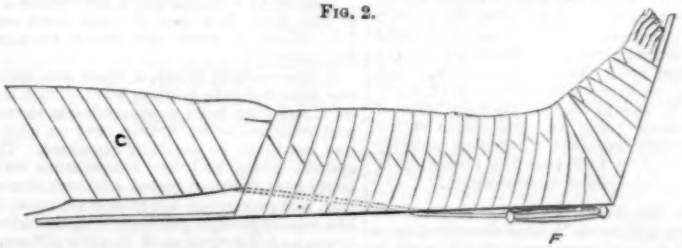


FIG. 2.



The foot and leg having been previously bandaged as far as the lower edge of the patella, and the splint padded so as to leave the slit uncovered, the strapping is heated by means of a bottle of hot water (which is more convenient than a strapping-tin), and while an assistant draws down the

upper fragment by grasping the muscles of the thigh, the straps of plaster are carried firmly round the limb from above downwards, extending from just below the gluteal fold to within three inches of the upper border of the patella. It being important that the band of calico should be kept in the middle line behind, the upper part of the thigh is then secured to the splint by a few turns of a roller. Lastly, as many elastic rings (those known as "office-bands" answer the purpose very well) as will serve to approximate the fragments without causing too much pain to the patient, are passed over the projecting ends of the pieces of wood, as at F, Fig. 2, on each side of the splint, so as to exercise sufficient traction on the muscles pulling on the upper fragment.

The progress of the case was most satisfactory from beginning to end. The effusion into the joint, which was never excessive, soon disappeared under the application of an evaporating lotion. The apparatus was not uncomfortable to the patient; the fragments in the course of a few days were in perfect apposition, and have remained so ever since, a slight thickening at the upper edge of the patella being all the evidence that remains of the fracture.

The accompanying woodcut (Fig. 3), taken from one of several careful dissections I have recently made, is intended to illustrate an important point which I have observed in each of them—viz., that the arterial arch by which the upper fragment of the bone is mainly supplied with blood is situated at the spot where the greatest pressure is usually applied; also that not unfrequently the internal superior and inferior articular arteries arise from a common trunk, so that the latter must inevitably be compressed against the internal condyle of the femur, thus interfering with the circulation in the lower fragment also. The dotted line across the patella represents the usual situation of a transverse fracture. And it is obvious that with an inch of separation all the vascular twigs over the face of the bone along the line of fracture are torn across, leaving the upper fragment entirely dependent on the above-mentioned arch for its vascular supply.

FIG. 3.

With regard to this plan of treatment, I believe its advantages over the ordinary methods are these:—That while no pressure is exerted at the seat of injury, and all tilting of the fragments is avoided, the muscles are nevertheless effectually controlled, and the circulation to the upper fragment is in no way interfered with. The strapping, unlike a bandage, has no tendency to slip or become loose, and grasps the thigh muscles in the same manner as the hands of an assistant; while the elastic bands are so arranged as to exert constant traction in a direction exactly opposed to that in which the muscles act, instead of at right angles to it, as in the ordinary method. Moreover, as the apparatus does not press upon the synovial pouch, it can be applied immediately, as there is in this mode of treatment no reason why we should wait for the subsidence of the effusion. Lastly, there being no constriction of the vessels supplying the upper fragment, a sufficient quantity of blood circulates through it to favour the formation of healthy callus, and the occurrence of osseous union.

My thanks are due to Mr. Berkeley Hill for his kindness in allowing me to try the apparatus I have described, in a case under his care, and for giving me permission to publish this account of it.

AT the University of Berne there are at present twenty-five lady medical students, among whom are twenty-two Russian ladies, whom the last ukase forced to leave Zurich.

ON THE

TREATMENT OF ACUTE RHEUMATISM WITH ACIDS.

BY R. CLEMENT LUCAS, M.B. LOND., F.R.C.S.

THERE are few diseases probably that have been so variously and at the same time successfully treated as acute articular rheumatism; and not a few reputations have been built upon the number of undoubted recoveries which have followed the many and diversified methods of treatment that have been recommended. Yet no thoroughly rational and effective line of action appears to have been agreed upon by physicians of the greatest experience in the profession, and one by one the reputed specifics with their superimposed theories fall before the tests of unbiased research. Of all the methods of treatment still in use, or now discarded, the alkaline is that which has found the greatest favour, because founded on the assumption that it would be well to neutralise the acid which circulates and is eliminated during a rheumatic attack. Although this line of treatment met with a serious rebuff when Sir Wm. Gull and Dr. Sutton published their cases treated with mint-water alone, and suffered severely by Dr. Owen Rees's equally effective treatment with lemon-juice, it is at the present time more often adopted than any other, and is relied on with almost child-like confidence by a great number of the profession. Many, however, who have had an opportunity of carefully observing the effects of large doses of alkalies in acute rheumatism must have been disappointed with the results; and especially so when they found that some heart affection appeared in spite of the free and early administration of the remedy.

A few years ago, after experiencing an attack in my own person, my interest became centred on this disease, and I for some time took notes of all the cases that entered the hospital, with a view of testing the value of the different forms of treatment employed. In doing so, I convinced myself that those cases treated with large doses of alkalies were longer in arriving at complete convalescence than those treated on an expectant plan; and I collected three or four cases in which peri- or endo-carditis became first evident after the urine had been rendered alkaline. I then determined, if an occasion offered, to test the effects of an opposite plan, which, supposing the alkaline treatment to be powerful for good, might be expected to prove injurious. Such an opportunity was afforded me in the summer of 1872, when for a time I was entrusted with the charge of Dr. Owen Rees's beds. All the cases of acute rheumatism which then came under my care were treated with mineral acids, and they all, with one exception, made rapid recoveries. The exception was a young woman who had had one or two previous attacks, and who suffered severely from cardiac mischief. She fell into a low, desponding, half-maniacal state, from which, however, she eventually perfectly recovered.

I regret that on searching the records I have been unable to find more than one of these cases carefully reported. The following notes are taken from a report by Mr. Symmonds:—

S. H——, aged thirty, a short and rather stout woman, was admitted into Addison ward, Guy's Hospital, Aug. 8th, 1872, suffering from acute articular rheumatism. The report commences by stating that on admission the woman was too ill to be carefully examined. There was a slight systolic bruit, and her temperature was 102°. She had lately been deserted by her husband, was a cook by occupation, and attributed her attack to exposure during a storm. She was ordered a mixture of hydrochloric acid every six hours, and five grains of Dover's pill every night. In the evening her temperature was 101·4°; pulse 126; respiration 36.

Aug. 9th.—Morning: Temperature 101°; pulse 120; respiration 46. Evening: Temperature 101·2°; pulse 122 respiration 58.

10th.—Morning: Temperature 102°; pulse 123; respiration 58. Evening: Temperature 101·4°; pulse 120; respiration 44.

11th.—Morning: Temperature 101·5°; pulse 116; respiration 45.

12th.—Morning: Temperature 101°; pulse 108; respiration 40.

13th.—Morning: Temperature 99·6°; pulse 104; respiration 36.

22nd.—All pain and swelling have subsided.

In publishing this case it is not my intention to advocate the universal adoption of acids in the treatment of acute rheumatism, but rather to show that such treatment need not be considered either dangerous or injurious. I believe, nevertheless, that, were acids widely tried, they would be found less to retard recovery than large doses of alkalies. The treatment may be considered tonic, and classed with quinine and iron, both of which are extensively employed in this affection.

I ought to add, that the publication of these remarks was suggested to me by seeing the case reported from Dr. Wilks's clinique in THE LANCET of the 14th inst.

St. Thomas's-street, S.E.

CALCAREOUS DEGENERATION OF THE LEFT TESTICLE.

BY WM. GUEST CARPENTER, F.R.C.S.

I WAS sent for to see Mr. S——, seventy years of age, who was confined to his bed from extreme weakness, brought on by a long-continued discharge of very offensive matter from the scrotum. Mr. S—— was by occupation a farmer, bachelor, of very quiet habits, disliking society. His niece was his housekeeper. She told me her uncle had been failing in health for some time, and would not have any medical advice; but, finding weakness increased upon him, and the smell from some wound he had was so offensive she could hardly sit in the room with him, she prevailed upon him to send for me. I detected the smell as soon as I entered the bedroom. He was in bed, his voice was very feeble, pulse weak and intermitting, hands and feet cold, nails livid, tongue dry and rather brown. On examining the scrotum I found it very much enlarged on the left side by an elongated hard swelling, about five inches long. There was a sinus on the front part, through which a very offensive sanious fluid oozed. The tumour was as hard as a stone. On passing the probe into the opening it grated against a hard, irregular substance. I enlarged the opening with a bistoury, syringed warm water into the scrotum, and succeeded in extracting a flat piece of hard calcareous substance, $\frac{1}{12}$ inch in thickness, resembling bone. I satisfied myself what the nature of the case was. I prescribed a tonic of bark and ammonia; ordered four glasses of port wine daily, and brandy-and-water at his meals, with beef-tea in the intervals.

I visited him every day, injecting warm water each time, and extracting pieces of the calcareous matter. In about a week his health began to improve. At the end of a month I had cleared out all the calcareous matter. I found the testicle gone—destroyed. When the wound healed there was a little thickening of the scrotum. It returned to nearly its natural size.

Mr. S—— was very much weakened by this disease, and his friends expected daily to hear of his death. At the end of six weeks I took my leave of him, and he afterwards enjoyed good health, and lived beyond the age of eighty.

Clifton-terrace, Maida-vale.

ROYAL HUMANE SOCIETY.—In the month of April next, 100 years will have elapsed since the foundation of the Royal Humane Society, and the committee have decided on holding a centenary festival, at which H.R.H. the Duke of Edinburgh has expressed his intention of presiding, to celebrate the great success which has resulted from its exertions to preserve life, and to improve and circulate all over the world the simplest and most scientific modes of treatment in cases of suspended animation. Due notice will be given of the day fixed for the festival, as soon as possible after the return of His Royal Highness from Russia.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

CASES OF TUBERCULAR MENINGITIS.

THE following is a continuation of the series of cases of tubercular meningitis which was commenced last week.

The second case is one of more interest from the coexistence of old caseous masses in the cerebellum, which had probably produced the difficulty in walking. Unfortunately the history is incomplete as to the nature of the difficulty.

Henry W——, aged eleven, was admitted under the care of Dr. Bristowe on the 6th of June, 1873. The father is living and healthy; mother said to be consumptive; of thirteen children ten are living and healthy, three died in infancy. Patient was always delicate; is said to have had rheumatic fever three or four years ago. Two years ago he had two fits in which he remained motionless for about twenty minutes. He was always "weak in the legs"; and twelve months ago entirely ceased to walk. Occasionally suffered from pain in the head, but not usually severe. For the last fortnight he has suffered from severe headache, the pain being chiefly frontal, and in the eyes. Has not had diarrhœa or vomiting; the bowels were open two days before admission. Had wandered a little the last three nights.

On admission, June 6th, 3 P.M., the patient was thin and weakly-looking, head large, forehead prominent. He was quite sensible and intelligent, complained of severe frontal headache and pain in the eyes and dimness of sight. No paralysis of facial or ocular muscles. Right pupil was slightly larger than left, and did not act so well to light; both pupils dilated readily; although there was no strabismus, he could not easily keep his eyes turned to either side. No diplopia. The face alternately flushed and grew pale very readily, without evident cause. Temperature 102·3°; pulse 124, regular; appetite bad; tongue slightly coated with white fur. Abdomen somewhat retracted, and extremely sensitive when touched, the slightest touch causing sudden retraction of the muscles and great pain; no tenderness on percussion, but the patient complained of some pain on pressure in the right iliac and splenic regions. Tâche cérébrale readily produced over abdomen and chest; over the latter there is much less hyperæsthesia. Nothing abnormal detected in lungs; heart sounds healthy. Whilst lying in bed he could draw up both legs with ease and without pain, and there was no evident paralysis either motor or sensory, but he could not stand. When moved he complained of great pain in the nape of the neck. Has perfect control over rectum and bladder.—8.30 P.M.: Temperature 101·9°.

June 7th.—Temperature: 9 A.M., 100·3°; 12 noon, 100·6°; 4 P.M., 100·4°. Pulse 96 to 100, fairly regular and equal. Rambled a little last night. To-day is much the same. He can read very large type with either eye, but with the right eye is unable to read "English" type, which he can with the left. Ophthalmoscopic examination: In the right eye, outline of disc indistinguishable, and the whole disc obscured by effusion; veins distended and tortuous; arterial branches numerous, but do not appear large; some portions of the vessels, especially towards the middle of the disc, are hidden by patches of exudation. In the left eye, disc visible, outer margin distinct, inner blurred; slight exudation along vessels, which are distended; neuritis much less marked than in the right eye.

8th.—Temperature—morning, 99°; evening, 100·9°.

9th.—Much the same as before. Temperature at 10.30 A.M., 100·3°; pulse 96, regular; bowels confined; no vomiting. Headache continues, and there is slight internal strabismus of the left eye. No delirium.

10th.—Has been delirious at times since yesterday after-

noon, when he began to repeat words and sentences constantly in a meaningless way. Looks much worse; is very pale, but when spoken to flushes readily; lies with half-open eyes and a drowsy look. When questioned, does not answer; and, if roused, only groans, and tries to get rid of the intrusion; but seems to understand somewhat, puts out his tongue when told, &c. Pupils vary much in size; difference as before; some tendency to turn both eyes towards the left. Temperature: 10 A.M., 99°; 11.30, 100·6°. Pulse irregular, and varies from 80 to 120. No vomiting. Ordered ten grains of chloral hydrate at bedtime.

11th.—Was very noisy last night, struggling violently, screaming and crying out for three or four hours. No vomiting or convulsions; bowels confined. This morning appears conscious, puts out his tongue, answers some questions intelligently, but stops short in the middle of a sentence, and becomes suddenly drowsy. At other times he repeats sentences, such as "Oh! my poor head," and "Oh! don't," for several minutes together. Morning temperature, 99·4°; pulse 74 to 80, very irregular; respiration appears slow, but cannot be easily observed on account of constant talking. Evening temperature, 100·7°.

12th.—Quiet wandering delirium since yesterday. Is drowsy; cannot be got to put out his tongue. Temperature: 10 30 A.M., 99·6°; 10 P.M., 99°. Pulse very irregular, from 72 to 110 per minute. Breathing very irregular, suspicious, with occasional intervals of fifteen to twenty seconds. Pupils as before. No paralysis.

13th.—11 A.M.: Had a very disturbed night, talking loudly all night; did not sleep. This morning is drowsy; can scarcely be roused; resists movement strongly. Pupils normal, act readily to light. Temperature 100·4°; pulse 88, regular whilst quiet, but when roused rises to 108, and becomes irregular.

14th.—Is more conscious, understands and answers some questions sensibly, but oftener in a wandering or irrational manner; knows his relatives. The left side of the face is now evidently partially paralysed, the right acting much more readily; closes both eyes equally and well; no ptosis; the tip of the protruded tongue turns slightly to the right; marked internal strabismus of left eye. Morning: temperature 100·6°; pulse 118, small. Evening: temperature 101°.

15th.—Unconscious, wandering delirium; frequent flushing of face; facial paralysis much less marked, but strabismus as before; ready tâche cérébrale. Temperature—morning, 101°; 2.30 P.M., 100·5°. Pulse varies from 80 to 140.

18th.—Looks rather more conscious when spoken to; had a quiet night. Temperature 99·4° in evening. Puts hand to forehead frequently, as if in pain.

19th.—11.30 A.M.: Less conscious; does not speak at all; face flushed; skin dry and hot. Temperature 102°; pulse 132. There are now almost constant movements of the right hand and arm; and muscicipia and carphology, which have been noticed occasionally for the last two days, are now much more frequent. He scarcely moves the left hand, arm, or leg at all, and there appears to be some pain when they are moved. The left leg is much less sensitive to a pinch than the right, and is drawn up a little, very feebly, when the sole is irritated. The eyeballs appear prominent to-day. Evening temperature, 101·1°.

20th.—Vomited this morning once; is more comatose to-day, but there is a strongly-marked frown on the face; left internal strabismus very marked; outline of left pupil irregular; slight ptosis of right eyelid; constant uneasy movements of right arm and leg continue. Temperature, at 11.30 A.M., 100·6°; pulse 160, small and jerking. Eyes examined by Mr. Liebreich, who confirms diagnosis of double optic neuritis, most marked in the right eye. No tubercle in choroid.

21st.—Complete coma. Pulse 160, small, thready.

23rd.—Continued comatose; no marked change has occurred in the symptoms; vomited once this morning. Died at 5.30 A.M.

Autopsy, nine hours after death.—Body somewhat emaciated; blood generally fluid.—Brain and membranes: Dura mater tense; slightly adherent at one point to the upper surface of the hemisphere; sinuses nearly empty. Hemispheres of cerebrum equally distended; convolutions flattened. Superficial veins of convexity full; pia mater rather too vascular, but not excessively. On removing the brain, the posterior border of the right hemisphere of the cerebellum was found to be firmly adherent to the dura mater. At the base of the brain a thick mass of tubercular and inflammatory deposit covered the interpeduncular space, matting together all the nerves and the optic commissure, none being excepted. The tubercular deposit extended along each Sylvian fissure, the sides of which were closely adherent; and it extended also into the brain through the lateral fissure. The lateral ventricles were distended by slightly turbid fluid; the fornix softened and pulpy; velum interpositum studded with minute grey granulations. The middle lobe of the cerebellum was converted into or replaced by a somewhat irregularly trilobed yellow tubercular mass, which was embedded in the brain-substance, but readily separable from it, presenting a smooth, yellowish-white, tolerably even surface. This mass was about the size of a large horse-chesnut; its two lateral lobes were symmetrical, or nearly so, whilst the central portion projected downwards and to the right, and pressed on the floor of the fourth ventricle and the right crus cerebri. On section, it was firm, yellowish-white in colour, becoming more opaque and cheesy towards the centre, but not softened nor calcareous; it closely resembled a horse-chesnut in colour and consistence. At the posterior part of the right lobe of the cerebellum was another nodule of similar character, which projected from the surface and was adherent to the dura mater. This measured about one inch in length and half an inch across; the posterior half was firm, the anterior softer, easily broken down, and readily separated from the brain-substance. There was no sign of inflammation around these masses, nor any grey granulations near.—Lungs small, congested, and dark-coloured, crepitant nearly everywhere; the upper lobe of the right lung was full of clusters of grey granulations of the size of rape-seed, and similar patches were found thinly scattered throughout the rest of both lungs, often apparently surrounding the bronchi and running along their course; none degenerating, and no cavities. Bronchial glands caseous and calcified. No tubercle visible in the peritoneum to the naked eye. The liver contained a few small, firm, yellow masses, calcifying in the centre, and distinctly encapsuled; their tubercular nature seemed doubtful. Spleen small, dark, firm, and containing a few similar masses. Kidneys apparently normal. Intestines not examined. Mesenteric glands slightly enlarged, but otherwise healthy. Eyes not examined.

KING'S COLLEGE HOSPITAL.

SUCCESSFUL TREATMENT OF FOUR CASES OF CLEFT IN THE HARD PALATE BY A NEW OPERATION.

(Under the care of Sir WM. FERGUSSON.)

WHEN we first briefly described Sir William Fergusson's new operation (vol. ii. 1873, p. 784) we promised to present our readers with an account of the ultimate result of the operation. Up to the present time all the cases have done remarkably well, the cleft in the hard palate having remained firmly closed by the two pieces of bone which were forced into it from both sides of the palate. We believe that Mr. Francis Mason is the only other surgeon who has adopted this method of dealing with the opening that sometimes remains in the hard palate after the cleft in the soft palate has been closed. In Mr. Mason's case the result has been as satisfactory as in those of Sir William Fergusson.

We are indebted to Mr. William Rose for the notes of the following cases and for some of the more minute details of the operation.

The first steps of this operation are somewhat similar to the old operation for closing the cleft in the hard palate—namely, paring the edges of the cleft, and making an incision down to the bone parallel to, and about a quarter of an inch from, the edge of the cleft on either side, the point of the knife being carried back just as far as the junction between the hard and soft palate. Into these incisions a chisel half an inch broad is inserted, and its edge directed against the posterior margin of the hard palate and made to cut from behind forwards, thus partly detaching a slice of bone on each side, with the soft tissues and

periosteum attached to their upper and lower surfaces. The result of this is that the sides of the cleft fall easily together, leaving a small aperture through the bone on either side. One, two, or, if the fissure be long, three stitches are passed through the lateral clefts by means of an ordinary aneurism-needle, and thus encircle the detached portions of bone and soft tissue, each suture passing through into the nasal cavity. It should be noted that there is no tension on the flaps, the threads merely keeping the parts steadily in contact. The amount of pain and constitutional disturbance is much less marked in the patients that have been treated in this way than when the old operation of dissecting up the soft parts from the bone has been resorted to.

From the liability of the flaps to twist in slightly, and from the thinness of the edge, Sir William Fergusson is careful to pare the sides somewhat obliquely, in order to present wider raw surface for adhesion. The sutures, which are kept in much longer than in the ordinary operation, cause no harmful irritation. The lateral clefts become filled up by new bone, which is rapidly thrown out and tends to keep the parts firmly united in the median line.

The first case in which the operation was performed was that of a girl aged eighteen, whose soft palate had been closed two years ago, and whose hard palate had been operated on by the old method three times, but unsuccessfully, except that the gap was somewhat lessened in size. Before the operation by the above plan on Nov. 22nd, 1873, the cleft was half an inch long and a quarter of an inch wide. Two sutures were introduced, and were removed in seven days. She was discharged at the end of the third week with firm union of the whole palate in the median line, and the lateral clefts closed.

The second case was also that of a girl of eighteen. The soft palate was closed three years ago. Since then she has undergone two operations for the closure of the hard palate, with only partial success, by the old method. The cleft was oblong, three-quarters of an inch long, and three-eighths of an inch wide. At the operation on Nov. 22nd two sutures were passed. The stitches were removed a fortnight afterwards, when there was a slight chink in the middle. The edges were therefore freshened, and a stitch reinserted. This was kept in fourteen days, and she was then discharged with a small pin-hole anteriorly.

The third case was that of a boy, aged fifteen, previously successfully operated on for double harelip and cleft in soft palate. One unsuccessful operation, followed by erysipelas, had been performed on the hard palate by the old method. Cleft one inch long and one-third of an inch wide. Operation as above on January 24th, 1874. Three sutures were passed. Union has taken place except at the posterior part, where there is a small hole which is slowly contracting.

The fourth case is that of a boy of fourteen, whose soft palate was closed in May, 1873. Last November the hard palate was operated on by the old method, and the cleft somewhat lessened in size. Before operation on the 7th inst. there was a narrow fissure about half an inch long. The bone in this case was rather difficult to cut. The patient has so far gone on well.

DORSET COUNTY HOSPITAL.

FRACTURE OF RIBS WITH EMPHYSEMA.

(Under the care of Mr. TUDOR.)

FOR the notes of the following interesting case we are indebted to Dr. Alfred Holles, house-surgeon.

W. P——, aged thirty-eight, farm labourer, was on July 26th riding home on a waggon laden with three tons of coal, and in consequence of his own vehicle colliding with a second waggon he was jerked out, and squeezed between the bank and the wheels of his own waggon.

Two hours afterwards he arrived at this hospital, perfectly sensible, his countenance indicative of intense apprehension, his breathing short, frequent, and painful; pulse natural and strong with vigorous beat. The second, third, and fourth ribs were found to be fractured at their sternal ends, and the rough edges of the bones had injured the lungs, causing considerable emphysema, which extended up into the neck on the left side, and over to the subclavicular region of the right chest.

"Dreadnought" strapping was applied half way round the injured chest without raising him from bed, no bandage being put on for several days. Ordered a quarter of a grain of tartarised antimony, ten grains of nitrate of potash, and a drachm of tincture of hyoscyamus, every four hours.

July 27th.—Traumatic delirium has set in. Night passed very restlessly. Pulse 120; respiration 40; temperature 99°. The abdomen is very tense and tympanitic. The emphysema is extending.

28th.—Delirium somewhat increased; patient very noisy; can be roused by loud questions, which he will answer. No retention of urine, but, on the contrary, it has been passed twice in bed, apparently involuntarily. Pulse 130; respiration 48; temperature 100°. At 8 P.M. he was ordered three grains of subchloride of mercury and a grain of opium every four hours. Antimony discontinued. To have half an ounce of brandy every two hours.

31st.—Delirium has passed off; patient slept fairly well last night. Pulse 100; respiration 40; temperature 100·2°. Emphysema and tympanites very much less.

August 13th.—Progressing most favourably. Ordered full diet with a pint of porter daily. For the last ten days has been taking a mixture of acid and bark.

19th.—Feels quite well. Got up to-day.

28th.—Discharged cured, thirty-three days after the accident.

CARDIFF INFIRMARY.

CASE OF PYÆMIA ORIGINATING IN DISPENSARY PRACTICE.

(Under the care of Dr. W. T. EDWARDS.)

CASES similar to the following come under the care of the physician more frequently than that of the surgeon. It is not, in fact, uncommon to find cases in the wards of hospitals which are regarded as being acute rheumatism, but which, on a more careful examination, would prove to be cases of pyæmia or of septicæmia with joint-affection. The absence of a post-mortem examination in the subjoined case is to be regretted, from the fact that without it there is some difficulty in deciding where and how the disease began, and what were the morbid conditions resulting from the blood-poisoning.

The friends of J. G——, aged sixteen, a labourer, living in a small badly-ventilated cottage in a back street of Cardiff, applied on the 10th January, 1874, to have him admitted into the Cardiff Infirmary. Infectious cases being, however, inadmissible, and the account given by the friends not being considered satisfactory, he was visited by the house-surgeon previous to admission. He then complained of pain in the left hip and in the ankle-joints, which were swollen and tender. The temperature was 104° F., and the pulse 108. With the exception of a small discoloured spot on the back, probably a commencing bedsore, there was no wound of any description on any part of the body. The mother stated that he sweated much at night, and wandered slightly.

The history of the illness as given by the mother was as follows:—Early in December, 1873, he fell from a plank, a distance of six feet, on his back. He was not much hurt, and continued at work, seeming to be in good health, until the 1st of January, 1874. On the day previous he had eaten a hearty dinner, and retired to rest as usual, but on attempting to rise in the morning he failed in consequence of severe pain in the left hip.

He was now seen by the district medical officer, Mr. Milward, and the case treated as one of acute rheumatism.

On the 10th of January he was seen by the house-surgeon, who, also considering it to be a case of acute rheumatism, admitted him into the infirmary.

Two days after admission an abscess appeared suddenly over the back of the left elbow-joint, and now the nature of the case was apparent. The abscess was opened. After this he rapidly lost flesh, and got weaker; he became delirious; another abscess formed in the right infra-clavicular region; the bedsore increased; emaciation rapidly progressed; another abscess formed over the left shoulder-joint, and he died on the 29th of January.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 17TH, 1874.

DR. HARE, VICE-PRESIDENT, IN THE CHAIR.

DR. MORELL MACKENZIE exhibited a Papillomatous Web removed from the larynx of a young lady, who till the age of twenty-three years had never been able to produce a vocal sound. From the history of the case it was clearly established that the growth was congenital. It passed between the vocal cords, and united them in the anterior half of the glottis. It was removed *per vias naturales* with cutting forceps, and the voice was thoroughly restored after a course of three weeks' treatment.

Mr. HOLMES asked if the patient had made any articulate sound at all above a whisper. The case was a very remarkable one; he could hardly understand how a person could exist without any voice at all.

Dr. LEARED asked Dr. Mackenzie what he considered the essential difference between a whisper and a proper vocal sound.

Dr. MACKENZIE, in reply, said he also considered the case a remarkable one, and for that reason he had brought it forward. The patient was voiceless, not speechless; in other words, she could articulate, but could not produce a vocal sound. The essential difference between these two functions was often overlooked, and Dr. Mackenzie remarked that he not unfrequently had cases of aphasia sent to him under the supposition that the vocal organ was affected. In reply to the President, Dr. Mackenzie said that the power of modulation of the voice was perfectly established.

Dr. COUPLAND exhibited a specimen of Tuberculosis of the Choroid from a child aged eight years, who died of tubercular meningitis three days after admission into Middlesex Hospital. On using the ophthalmoscope, the optic discs were seen to be normal, but there were seen scattered among the vessels a number of yellow flakes varying in size; they appeared to have no relation with the choroidal and retinal vessels. At the autopsy there was marked tubercular meningitis; the lungs and spleen were studded with miliary tubercles. The posterior two-thirds of the eyeballs were removed; the retina was intact, and a number of yellow spots were seen through it; on removing it, a number of small nodules, about twenty in each eye, were found. These were made up of round nucleated cells. The centre of the older nodules was breaking down. The tubercles were now seen to be round the vessels in the sheaths, and the case bore out Cohnheim's views on the anatomy of tubercle. Only one case of this kind had been reported six years ago by Mr. Soelberg Wells. Tubercle of the choroid is rare, but Cohnheim said it occurred in all cases of miliary tubercle.

Dr. F. TAYLOR showed an Aneurism of the Aorta, opening into the Pulmonary Artery. The specimen was taken from a man aged thirty-nine. He had been a soldier, and served in India; he had never had venereal disease, gout, or rheumatism. He had suffered from dyspnœa for some time, which latterly had increased; then the leg began to swell, orthopnœa came on, and crepitation at the base of one lung. There was a thrill felt towards the apex of the heart; a systolic and diastolic murmur were heard at the base. The man died forty-eight hours after admission to Guy's. The heart weighed 28 oz., the right side dilated. An aneurism of the aorta just above the valves was found projecting into the pulmonary artery, and the two communicated by an opening. The aorta was atheromatous, the aortic valves healthy; the posterior pulmonary valve was united to the walls of the aneurism. Through the arrangement of the valves the blood must have passed back into the right ventricle.

Mr. MYERS exhibited an Aneurism of the Aorta bursting into the Pericardium. The patient, a soldier, died suddenly; there was no history of ill-health; he had been doing his duty till his death. The aorta was atheromatous. He had twice been in hospital for primary syphilis. He believed the condition of the aorta was due to overstrain, tight clothing, &c. Dr. Aitken said it was due to syphilis.

Mr. ARNOTT asked if there was any history of syphilis beyond the sore; it might have been only a soft sore. Had there been any symptoms of constitutional syphilis?

Mr. MYERS said there was no history of that; he had never been under his care for constitutional syphilis. The second time he was in hospital he had some affection of the eye, but he had never had any specific treatment.

Dr. GREEN said that the changes in the artery in syphilis were in the external coat, the fibrous; he had never heard atheroma put down to syphilis.

Mr. MYERS said Dr. Aitken, of Netley, had recorded twenty-six cases of atheroma, and seventeen of them had suffered from marked syphilis. He (Mr. Myers) maintained it was not the cause.

Dr. WHIPHAM said there was in the St. George's Museum a preparation of the aorta of an infant which had suffered from hereditary syphilis; the aorta appeared to have all the characters of atheromatous change.

Mr. HOLMES thought, from what Mr. Myers had said, there was little or no evidence to connect the disease of the aorta with syphilis. Most soldiers who suffered from syphilis suffered from the chronic abuse of alcohol, and the latter was a common cause of degeneration of the walls of arteries. Syphilis alone never produced it.

Dr. LEARED referred to a specimen of heart disease he had exhibited, where gummatous tumours were found at the aortic valve and disease of aorta. He thought the change depended upon syphilis.

Dr. CAYLEY, who had reported upon the specimen, said the change was like the ordinary atheroma, but the report did not state what had caused it.

The PRESIDENT thought no one could see many specimens of atheromatous disease without tracing a connexion between them and chronic alcoholism. He had seen patients die of internal syphilis who had no disease of vessels. If syphilis were a cause, the evidence goes to show that it is not a very frequent one.

Dr. THORNTON brought forward an Ovarian Tumour associated with secondary cancer. The specimen was taken from a woman aged thirty-five, who had been under the care of Mr. Spencer Wells. She noticed a tumour six months ago, and she was tapped and nineteen pints of fluid drawn off; but the tumour did not quite disappear. On admission she was tapped again, and then she began to suffer great pain. She was again tapped; the pain continued, and nodules were felt in the vagina; the uterus was free and movable. The patient died exhausted. At the autopsy, the front of the cyst was adherent to the abdominal wall; the lower part of cyst and the right ovary a mass of cancer; there were a number of nodules in the connective tissue round the rectum, and a nodule at the fundus of the uterus. He thought it began in the nodules around the rectum, and secondarily affected the cyst; the cells there were full of fat and disintegrated.

Mr. ARNOTT thought the primary tumour was in the uterus, and referred to a case where he had seen this. The occurrence of primary cancer of this form occurring around the rectum was at variance with the views of cancer; the fatty degeneration of cells was not sufficient evidence.

Mr. HULKE asked if the nodule found in the uterus was in the muscular tissue, or so near the cavity as to have originated in the mucous tissue. Did it originate in the mucous membrane in Mr. Arnott's case?

Mr. ARNOTT said he thought his originated in this way.

Dr. THORNTON thought in his case the outer part of the fundus was involved, and the mucous membrane not at all. He thought it began in the areolar tissue around the rectum.

Dr. THORNTON then showed a Dermoid Ovarian Cyst, removed from a girl of eight years. On operating, a cyst was found full of ovarian fluid; lying behind it a dermoid cyst. The ovary was enlarged and spread out over the back of the cyst. The wall of the cyst was fibrous and without epithelial lining; the outer wall of the dermoid cyst was fibrous. A piece of bone with hair from it was found, and this was covered with skin. The case was interesting. Were the two cysts an expansion of the fibrous stroma of the ovary? Several small cysts were found, evidently expanded Graafian vesicles.

Mr. HOLMES showed a Calculus weighing 7½ oz., the greatest length 3·8 in., width 2·8 in., and thickness 2·6 in.,

which he was unable to extract from a patient, aged forty. The man had had symptoms of stone for nine years. He was sent up to St. George's Hospital one month ago. On sounding him he came upon a stone in the urethra; the prostate appeared distended by a mass of stone. He divided the perineum in the median line, but could not move the stone; he enlarged his incision, cutting far into the rectum, but still could not move the stone. The stone was too big to crush by the lithotrite, even if he had had one at hand sufficiently strong. The man died two days after. The composition of the calculus was uric acid, oxalate of lime, with some phosphatic deposit on the surface. The ureters and the pelves of the kidneys were dilated. It was exceedingly rare to find now a stone of this size, a patient not being allowed to go on so long unrelieved. In reply to Mr. Thomas Smith, Mr. Holmes said nothing could be felt by palpation of the abdomen.

Mr. GAY showed a large Cyst removed from the Axilla of a man aged thirty. He had noticed it for two years; it was high up in the axilla, and the man was obliged, from its size, to keep his arm at a right angle to his body. It was removed without difficulty, and the case did well; a cyst of such a size was rarely met with. He thought it was of inflammatory origin.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEB. 4TH, 1874.

DR. E. J. TILT, PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—James Charlesworth, M.R.C.S., Hanley; William Henry Kempster, L.R.C.P. Edin., Battersea; William Borwick Robertson, M.D., West Dulwich; and Arthur Roper, M.R.C.S., Blackheath.

The PRESIDENT, before proceeding with the business of the evening, alluded feelingly to the loss the Society had sustained by the death of its late Secretary, Dr. John J. Phillips. Dr. Edis had been appointed by the Council to the vacancy thus caused.

Dr. J. C. HAYES exhibited a distorted Hodge's Pessary that had been worn continuously by a patient for five years without being removed. During the last three months it had caused discomfort. On examination the anterior extremity was found to have ulcerated into the vagina, and was encircled by a firm transverse band, which had to be divided by the bistoury before the instrument could be removed. He thought that all patients wearing pessaries should submit themselves for examination from time to time.

Dr. EDIS mentioned a case that occurred to him, where one end of a pessary had completely buried itself in the posterior wall of the vagina. Instead, however, of cutting the band, he divided the instrument, and thus extracted it—a safer plan, he thought, than dividing the band when this was broad or thick.

Dr. BARNES referred to similar cases, and quite agreed in the necessity of examining all patients wearing pessaries, at least once in every three months.

Dr. PLAYFAIR, Dr. ROUTH, and Dr. WYNN WILLIAMS also spoke of the advisability of watching patients whilst wearing pessaries.

Mr. SIDNEY TURNER showed a specimen of Tubal Pregnancy occurring in a woman aged thirty-five. She had miscarried once previously at the third week, and had advanced about two months in pregnancy when, whilst out walking, she was suddenly seized with pain in the hypogastrium, and was conveyed home in a cab, where, shortly afterwards, he saw her. She was then in a state of collapse, very blanched, cold, and pulseless, but perfectly sensible. He made a vaginal examination, but found nothing beyond a uterus slightly increased in size. There was no hæmorrhage per vaginam, nor any bulging in Douglas's pouch. From the suddenness of the attack, and the very anæmic appearance of the patient, he thought there was a rupture of an extra-uterine fœtation. Perfect rest was enjoined, but fifteen hours after the onset she suddenly jumped out of bed, and immediate fatal syncope was the result. At the autopsy, thirty-six hours after death, the peritoneum was found to be filled with about three quarts of blood in a semi-coagulated state. The uterus was slightly enlarged, but contained no blood, although the Fallopian tube was pervious along the entire length. The right Fallopian tube was distended in its middle part to the size of a small egg, and here rupture had occurred. There was a well-marked Graafian vesicle in the right ovary, and adhesions between the ovary and uterus had taken place, showing previous inflammatory mischief. The uterine cavity was filled by the decidual membrane, which was not separated, but could easily be detached.

Dr. ROUTH asked whether the idea of an exploratory incision had been at all entertained.

In regard to Dr. Routh's suggestion as to the advisability of an exploratory incision, even when the patient was in articulo, Dr. SAVAGE hoped no one would be induced to hazard one under such circumstances, since the discredit of killing the patient would fall, and rightly too, on the practitioner. He wished also to call attention to the loose attachment of the remarkably well developed decidua; it could be easily detached, leaving, to all appearances unchanged, the internal surface of the uterus.

Dr. Hayes, Dr. Heywood Smith, Dr. Barnes, Dr. Wynn Williams, and Dr. Madge also took part in the discussion.

Mr. A. B. STEELE, of Liverpool, read a paper on

TWO CASES OF DYSTOCIA FROM CONTRACTED PELVIS.

In the first case forceps and version had been resorted to six times in six separate labours, with a fatal result to the child in each instance. In the seventh labour Siebold's forceps were tried, but failed to deliver the head; version was performed, and a living child extracted. In both instances the induction of premature labour had been suggested, but was not permitted.

Dr. BRAXTON HICKS remarked upon the advantage of resorting to version in place of employing the forceps.

Dr. PLAYFAIR read a paper on

PUERPERAL THROMBOSIS.

He pointed out that on account of its tangible symptoms the attention of the profession had been chiefly limited to one only of the manifestations of this disease—phlegmasia dolens. He discussed at considerable length the analogies between this and thrombotic affections in other parts of the body, especially in the heart and pulmonary arteries, and brought forward many arguments to prove their essential identity. He also considered the question of spontaneous thrombosis and embolism in the pulmonary arteries, arguing, in opposition to the view of Virchow and other writers, that the former was a possible though rare affection. The anatomical conditions accompanying peripheral thrombosis and central thrombosis and embolism were also discussed. The author then proceeded to consider the possibility of eventual recovery after pulmonary obstruction, bringing forward several illustrative cases, and concluded by discussing the treatment.

Dr. BARNES inquired whether the clot had been noticed to be present on the same side as that to which the placenta was attached. He related a case in which the application of six leeches to the cardiac region had produced marked relief, the patient ultimately recovering.

Dr. FRANCIS TAYLER thought there were three points worthy of notice,—1stly, it appeared that the patients were suddenly found to be at the point of death before any danger had been apprehended; 2ndly, in those cases which were examined after death a firm laminated clot was discovered, evidently not of very recent formation; and 3rdly, in those cases in which a stethoscopic examination was able to be made some abnormal sound was discovered at the base of the heart. He would suggest, therefore, that if the heart sounds were subjected to examination during the puerperal period, either as a matter of routine or, at any rate, more generally than they usually are, in all cases, or at least in those in which thrombosis is prone to occur, as after hæmorrhage, the danger might in some cases be foreseen, and by suitable treatment be lessened or averted. He related a case where fatal embolism occurred on the eighth day, no suspicion of the danger having presented itself, although a firm laminated clot was found after death in the pulmonary artery.

Dr. J. C. HAYES said he was quite at one with Dr. Playfair that thrombosis had a wider application than was commonly given to it as a cause of disease and of sudden death in puerperal women. He looked upon phlegmasia dolens

and ante-mortem plugging of the pulmonary artery as dependent upon the same conditions, the clots being produced by the changes wrought in the blood by the pregnant state, or its accidents, such as flooding, septicæmia, &c. Inflammatory or other changes in the coats of the veins were not necessary to induce clotting; indeed, in most, if not in all, cases he believed such changes were caused secondarily. Dr. Playfair had not mentioned the sudden paralysis with or without loss of consciousness occurring so frequently during or immediately after parturition. Were they not produced in most instances by thrombosis of the cerebral arteries? It was incorrect to suppose that plugging the pulmonary artery was always brought about by a septic state of the blood. He narrated an instance of a young lady in excellent health who died from embolism shortly after she had heartily enjoyed herself at a large dance. The case was seen and diagnosed by Dr. George Johnson during life.

Dr. ROUTH referred to Dr. B. W. Richardson's researches on this subject, which had not been alluded to by Dr. Playfair. The blood to circulate must be alkaline, but it was possible that in many of these diseases accompanied by blood-poisoning the blood, without being exactly acid, might be less alkaline than normal; or the very increased temperature, usually observed in the early period of these cases, might in a measure expel the free ammonia in the blood, and so facilitate the deposition of fibrin. Whilst it was clear that the ammonia was not the sole cause of the solution of the blood, it was a powerful contributing agent to this end. The liquor ammoniæ had a great advantage over the carbonate or alkalies generally. These weakened greatly the already exhausted patient, and their elimination was not so rapid. The usefulness of this remedy in phlegmasia dolens, however, as well as in the more serious cases of clot in the heart, was at once obvious from the results obtained. He mentioned three cases in which, from the symptoms, no doubt existed as to the presence of clot in the heart benefited by the exhibition of ammonia.

Dr. SAVAGE thought it was impossible to discuss fairly a paper of such length in the short time now at disposal. However excellent such long papers might be, they had the disadvantage of taxing the attention so much that the train of reasoning connecting the beginning with the end was lost sight of. Thrombosis and embolism he imagined had long ago been completely worked out. Would it be too much to expect that Dr. Playfair would, as a favour, point out wherein he considered his views novel or peculiar, thereby saving much waste of time in going over old ground? He proposed that the discussion be adjourned till the next meeting.

Dr. CHAMBERS having seconded this, it was resolved by the Society to adjourn as proposed.

Dr. PLAYFAIR, in reply to Dr. Routh, stated that Dr. Richardson himself, as well as everyone else, had long given up the theory of coagulation of the blood depending on want of alkalinity. Ammonia might be useful as a diffusible stimulant, but in no other way.

Reviews and Notices of Books.

On the Special Function of the Sudoriparous and Lymphatic Systems; their Vital Import, and their bearing on Health and Disease. By ROBERT WILLIS, M.D. London: Trübner and Co. 1867.

THIS work has been forwarded to us by Dr. Willis, with a letter, stating that, although published some years ago, he believes that it contains something like an anticipation of Klein's researches on the functions and significance of the serous membranes. Whilst acknowledging the ability with which Dr. Willis has treated the subject of cutaneous exhalation and absorption, we regret to say that, after a careful perusal of this part of his work, we are unable to agree with his conclusions. In the second part, however, we find that he has made use of the remarkable expression that the lymphatic vessels may be viewed as the essential elements of a filiform and all but universally distributed gland.

The thesis maintained by Dr. Willis in the first part of this treatise is, that the office of the sudoriparous system of glands is to abstract water from the peripheral circulation, and he considers that, by effecting this, these glands are "subservient to securing the conditions necessary to the return into the venous circulation of the fluids that have been shed from the arteries for the purposes of nutrition and vital endowment."

That the discharge of water by the skin should be in direct relation with the regulation of its temperature cannot be regarded as a far-fetched notion: since we know, on the one hand, that water in its evaporation absorbs an immense amount of heat; and, on the other hand, it is evident enough that the elimination of water from the skin rises *pari passu* with the external temperature, till at last, when this reaches a certain point, the discharge is no longer aeriform or insensible, but the fluid stands in large beads upon all parts of the surface. We do not, therefore, quite comprehend the surprise which Dr. Willis expresses as to the conclusion that physiologists generally have drawn from the experiments of Fordyce, Blagden, and others. That the reduction of temperature is not continuous, and that after a time the whole body, if exposed to great heat, rises in temperature, is no more astonishing than that, although our capacity for generating heat is considerable, the temperature of the body falls if the whole body be exposed for a time to a temperature much below its normal degree. Dr. Willis refers to the experiment made by Blagden on a dog, which was exposed to a temperature of 220°, and whose temperature rapidly rose from 101° to 108°. But the dog is just the animal in which a rise of temperature might be anticipated, since its evaporation by the skin is very slight and imperfect, and the argument would tell the other way—that is, in favour of the view that the ready evaporation of water by the skin of man serves, as Fordyce's experiments on himself showed, to prevent any rise for a long period. The experiments made by Delaroche, again, are unsatisfactory; for the simple reason that, like Fordyce, he went into the heated atmosphere with all his clothes on, and was, therefore, at once placed under conditions analogous to those of a man who should enter a hot atmosphere loaded with watery vapour. The regulating power of the skin could not act. It is true that Davy's observations demonstrate a slight rise of three or four degrees of Fahrenheit in passing from the temperate to the torrid zone; but how does Dr. Willis explain the fact that men live for many weeks together in countries where the temperature is often for hours together over 110°? Dr. Willis remarks that, under such circumstances, it is necessary to sit exposed to air in motion under punkahs, &c. But here, again, the argument tells the other way; for we do not suppose that Dr. Willis imagines for a moment that air at 110° in motion is a whit cooler than when quiescent. The real object of the punkah surely is to renew the air in direct contact with the body, and to replace it by air containing less aqueous vapour.

Dr. Willis lays much stress on the greater specific gravity of venous over arterial blood, which he believes to be the result of the elimination of water by the sudoriparous glands, affording the condition necessary for the process of venous absorption; and in so far as venous absorption occurs, this is perfectly correct, but, as a matter of fact, it is probable that the greater part of the fluid eliminated from the arteries or lymph is not reabsorbed, but enters the lymphatic system, and by this channel re-enters the blood.

Some of Dr. Willis's statements are transparently incorrect. On p. 22, for example, he argues that "it is obvious that as the heart injects a common trunk which feeds the vessels of every part of the body, if there be more blood passing through the capillary network of the skin during active exertion, there must in like manner be more passing

through that of the kidney and of every other element of the body." The exact opposite would be much nearer the truth. So again, Fourcault's observation that animals covered with a varnish soon die has been shown to be due to the fact that they radiate heat better, and consequently die from cold. Wrap them up in wool after varnishing, and no harm ensues. We regret that we are unable to agree with another of Dr. Willis's opinions, upon which he lays great stress—namely, that one essential function of the lymphatics is the abstraction of the watery element of the blood for "the specific end of rendering the returning stream in the deeper-seated parts of the body of greater density than the outgoing stream," and so, we presume, to promote absorption by the veins. We fail to see the importance of the function thus described, and believe that the modern doctrine, that the lymph is merely the excess of the pabulum which escapes from the vessels for the nutrition of the tissues, is nearer the truth. Dr. Willis, however, admits that the development of blood-discs is probably one function of the lymphatics, and in this, as well as in his statement in reference to the whole system being properly regarded as a gland, he has to some extent antedated Klein's views, though it is mixed up unavoidably, considering the time when Dr. Willis wrote, with many crude anatomical notions.

Veterinary Medicines; their Actions and Uses. By FINLAY DUN, formerly Lecturer on Materia Medica and Dietetics at the Edinburgh Veterinary College. Fourth Edition. Edinburgh: Edmonston and Douglas. 1874.

SINCE Mr. Finlay Dun published the first edition of his work on Veterinary Medicines in 1854, the science of which he is an able exponent has made considerable advances; accordingly, we find much additional and valuable matter in the volume now before us. The author has not departed in any important particular from the arrangement which he adopted at first. There is no attempt made to classify medicinal agents; but they are placed in alphabetical order, the common English name standing first, the chemical names, both old and modern, following in order. Mr. Dun writes, as he states, for the information of the stock-owner as well as the veterinary surgeon; and his observations on the actions of medicines will be intelligible to non-professional readers, the more so as he refers to numerous experiments which illustrate the effects of the most important medicines on the lower animals. For example, under the heading "Podophyllin" a number of cases are quoted in which the drug was administered to dogs, cattle, and horses; the results are definitely stated, and the reader is enabled to form a better idea of the effects of the drug than he would be from the perusal of the most elaborate account of its natural history, chemical and physical properties, minus the practical references. In the introduction, which occupies more than a hundred pages, a general account is given of the actions and uses of medicines, and of the modes of preparing them for exhibition. At the end of the work there is an index of the diseases to which animals are liable, the name of each disease being followed by a list of the medicinal agents which are usually employed as remedies.

Mr. Dun's work has always held a good position as a text-book, particularly in the Scotch veterinary colleges; and the last edition may fairly claim to be an improvement on the previous issues.

OUR LIBRARY TABLE.

Monthly Microscopical Journal. Edited by Dr. LAWSON. Hardwicke. February, 1874.—This number contains four papers. 1. On the Origin and Development of the Coloured Blood-Corpuscles in Man, by Dr. H. D. Schmidt, of New Orleans. 2. Further researches into the Life History of the Monads, by Mr. W. H. Dallinger. 3. On a simple method of preparing Lecture Illustrations of Microscopic Objects, by Mr. Dallinger. 4. A Method of Dissecting Podura-Scales, by Mr. Wenham. The first two are the most interesting. Dr. Schmidt took advantage of an opportunity of examining a very early human ovum that happened to fall into his hands, and found that the walls of the umbilical vesicle exhibited a great number of coloured corpuscles in all stages of development, moving through larger or smaller canals. The tissue of the vesicle itself was composed of very large and clear hexagonal cells, containing a large round nucleus, and further investigation proved that these were the primary organs of origin of the coloured blood-corpuscles, for in their interior one or several embryo blood-corpuscles were constantly found. Dr. Schmidt maintains that those corpuscles which are commonly called the first set or brood of blood-cells of the embryo, and which have been described by Cramer, Vogt, Paget, and others, are really the mother cells, and that what have been termed the nuclei of this first set of cells are in reality the embryonic red corpuscles. The Rev. Mr. Dallinger and Dr. Drysdale's observations may thus be summed up. The ordinary egg-shaped monad passes through a series of mutations of form until it settles as a minute sphere. A white cruciform mark suddenly appears, and is succeeded by others at angles to the first. A rapid interior action ensues, and at length the whole body of sarcode is divided into a large number of long bodies, packed closely together, which separate as flagellate monads. Besides these, there is a much smaller number of larger rounder monads of the same form, distinguished by their granular aspect. These seize and absorb the common form. The result is a *still* condition in the form of a sphere. This eventually opens, and a fluid is poured out, or what appears like it; no sporules can be seen. The result of this, however, is the growth of minute specks, which can only be supposed to spring from invisible germs, and from these forms grow like the parents, and the cycle is by them re-entered.

Life on the Gold Coast. By CHARLES ALEXANDER GORDON, M.D., C.B., Deputy Surgeon-General, &c. London: Baillière, Tindall, and Cox. 1874.—In this work the author has included his recollections of the Gold Coast derived from his private journal whilst serving there in 1847–48, with some additional notes resulting from his subsequent observation and experience. He has gathered together a large number of facts connected with the topography and natural products of the Gold Coast, the different tribes and their origin, with their manners, customs, and religious observances. The notes from Dr. Gordon's diary of the expedition against Koko Acka, king of Appolonia, and the numerous sanitary and medical hints scattered throughout this book, are likely to prove both useful and interesting at the present time. Polygamy prevails among the Ashantees. Some restriction is, however, placed upon the king, our enemy, in this respect; for we notice he is not permitted to have more than 3333 wives—a fair allowance. Artemus Ward asked Brigham Young, with his 40 wives, "how he liked it; leastways as far as he had got:" and it is clear that the Mormon chief had gone but a very little way in the direction of the Ashantee chief.

English Matrons and their Profession. By L. F. M. London: Sampson Low, Marston, Low and Searle.—"The object of this profession is the creation of homes and the maintenance of home and family life." Such is the text of the book, and in these days of the shrieking sisterhood this tone is especially welcome. There is, however, the little rift that mars the sweetness of the lute, and at p. 12 "justice requires" a footnote to expose the jealousy of the medical profession

towards women. In Chap. IX. nursing is admitted to be "almost exclusively the function of women." "The science of medicine is changing into the science of nursing," therefore "the demand women are making to study medicine is the natural outcome of women's matronly nature." We fancy this logic is the outcome of the same nature; yet it would be quite unobjectionable if left unsupported by insinuations against "the governors as well as the surgeons" of various hospitals, and the depiction of all male medical students as realities more degraded than the fictitious "Bob Sawyers." No doubt there is much room for improvement in hospital nursing, but in the treatment of this subject we can scarcely credit the authoress with the practice of that rigid impartiality professed in her preface.

The Illustrated Guide for Amateur Gardeners: Spring, 1874. Daniels Bros., Norwich. — We can recommend this book to those of our readers—and they are many—who are devoted to amateur gardening. The work contains a great deal of information, is handsomely got up in a chromo-lithograph wrapper, while its price is only 1s.

CENSUS OF INDIA.

I.—BOMBAY CITY.

INDIA, under British rule, is in a fair way towards rivaling our departments at home in the production of what is known as "blue-book literature." For the vague and more or less untrustworthy estimates or even surmises which were all that we once had to rely upon in respect of the numbers and distribution of the population of India, their social and sanitary conditions &c., we are gradually becoming accustomed to the substitution of elaborate reports carefully prepared by Government officials, and issued under the sanction of the supreme authority.

Prompted, we believe, by representations from the English Census Commissioners, the Government of India wisely determined upon making an effort to obtain, for the first time, a complete census of the Indian Empire as nearly as possible concurrent with the home census of 1871. Of the aggregate results of this great undertaking we hope to be able to speak on a future occasion. At present we confine ourselves to noticing briefly the special reports which are before us having reference to particular localities, believing that such notice may be useful as indicating to some extent the degree in which the several monographs may be worth consulting *in extenso*.

We will take first the census of the City of Bombay, the report whereon has been prepared by Dr. Gillham Hewlett, who, we regret to observe, signs himself "late health officer" of the city. From his many reports on the sanitary condition of the city which have come under our observation we have judged Dr. Hewlett to be emphatically "the right man in the right place," and it is to be hoped that his sanitary experience has been lost to one place only that it may be utilised in another part of that vast field which in India is not likely to be adequately covered for a long while to come.

The importance of frequent enumeration of city populations is strikingly shown in the case of the City of Bombay. In 1864 a census was taken which gave a total population of 816,562; in 1872 the number of inhabitants was found to be 644,405. The decrease amounted to 172,175 persons, or 21 per cent. in eight years. Now, during this interval all the statements of the rate of mortality ruling in the city have been based upon an assumed population of over 800,000, whereas it seems to be pretty clear from this census report that probably at no time since 1868 has the population exceeded 700,000; to such large extent, therefore, must the rates of mortality have been in the meantime understated. It appears that when the census of 1864 was taken Bombay was crowded with labourers and artisans attracted thither by the demand for their services created by the exceptional commercial activity which resulted from the civil war in America. The city was then "literally crammed with men, women, and children," and this state of things lasted until the commercial tide receded within its own limits, when the surplus population soon dispersed itself. A proposal was made in 1868 by the municipal commissioner, Mr. Crawford, to take a fresh census of the city, but it was negatived by the authorities.

The process of taking a census in India, though in principle agreeing with our home practice, has necessarily peculiarities of its own. Thus in Bombay "notice was daily given throughout the native town by beat of *battakee* pointing out to the people the benefits likely to accrue from a correct census"; the aid of the press was also given, and handbills in the vernacular languages were widely distributed, while native gentlemen exerted themselves to allay any suspicions or fears which were felt by the natives as to the object of the inquiry. Dr. Hewlett bears most favourable testimony to the native behaviour on the occasion:—"In going through the native town on that (census) night the great order everywhere to be observed was very remarkable. The people seemed anxious to assist the Sirkar, and came forward voluntarily to deliver up their householder's schedules. Not the slightest opposition was offered to any person engaged in taking the census by any one."

Of the extent of information contained in the report before us the best idea may be given by stating that the schedule supplied the means for tabulating the age, sex, conjugal condition, caste, race, occupation, religion, and state of education of the people inhabiting the city; provision was likewise made for ascertaining how many were vaccinated or had had small-pox, the number of lepers, of lunatics, of the blind, dumb, lame, and of eunuchs. Upon all these facts Dr. Hewlett comments, and his sketch of the characteristics of the races, castes, and religions contains much interesting information.

With its reduced population, Bombay stands the third, if not the second, most populous city in Her Majesty's dominions. The disproportion of the sexes is such that to every 100 females 163 males were enumerated, a result which is in some measure ascribed to the fact that the census was taken at a time of year when there is always an influx of men from the country districts, who find employment during the busy season, and return to their homes when that is over. But the position of Bombay "as the gate of India from the west" necessarily imparts an exceptional character to its population; in the European community, for example, there were 258 men to 100 women, the disparity being noticeable only at ages between fifteen and fifty-five—the migratory period of life. The large balance of female population in England has no doubt its counterpoise in the "roving Englishmen" who in India and elsewhere turn the scale in an opposite direction.

On an average, each house in Bombay was, in 1872, occupied by 21 persons, as compared with 31 in 1864. "Fearfully overcrowded" as the city evidently is, Dr. Hewlett considers that, from a sanitary point of view, a new town needs to be built for the adequate accommodation of the inhabitants.

About 30 per cent. of the people appear to enjoy the protection of vaccination, the proportions ranging, in respect of race, from 14 amongst the Negro-African residents, 23 amongst the Chinese, 30 amongst the Hindoos, 60 amongst the native Christians, and 94 amongst the Europeans. The percentage of those who have suffered from small-pox ranges conversely from 4 amongst Europeans to 77 amongst the Negro-Africans.

The returns relating to professions and occupations show that there were at the census date 324 medical practitioners in Bombay, and upon this fact Dr. Hewlett thus comments:—"This title has in Bombay a very wide signification, and embraces gentlemen who possess the highest attainments in medical, surgical, and chemical science, and the native hakeem, who divides all diseases into hot or cold, and who treats them accordingly; but allowing that empiricism—i.e., knowledge derived from experience—is of value, as doubtless it is, there was only one person who professed any knowledge whatever of the medical art to every 1988 of the inhabitants. It is sad to think how terribly few sick persons in this city can ever be seen by any medical man, and the above figures also tend to show how inaccurately the causes of death in our mortuary tables must necessarily

be returned. If medical aid cannot be afforded during life, a skilled inquiry to ascertain the cause of death should at any rate be ordered by law to be made in every case before the body is disposed of. Of the so-called medical practitioners 50 were Brahmans, 4 Budhists, 3 Bhatias, 42 Hindus of caste, 51 Muhammadans, 48 Parsis, 4 Jews, 43 native Christians, 10 Eurasians, and 60 Europeans." There were 23 persons, 12 of whom were Europeans, practising the veterinary art, and 203 men and 34 women returned themselves as hospital attendants, whilst 326 females were entered as midwives and nurses.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A COUNCIL meeting was held on Thursday, February the 19th, at 33, Dean-street, Soho; Dr. Rogers occupied the chair. The meeting was convened for the purpose of deciding when and where the annual general meeting should take place, and of determining what should be the immediate future action of the Association, when it was resolved that, seeing that many of the influential supporters of the present Government are committed to the policy of dealing with the question of local taxation, with the view to its more equitable incidence, and this Council holding the opinion that the maintenance of the health of the destitute poor is a question in which the whole community is interested, it is advisable that the influence of the Association, in the press and in Parliament, should be directed to securing that the salaries of the medical officers should in future be paid wholly from the Consolidated Fund instead of partially, as at present. It was also resolved that as it is desirable that all medicines and appliances prescribed for the sick poor should be provided by the local authorities, and in places sufficiently populous that qualified dispensers should be appointed, every effort be made that the dispensary clauses of Mr. Hardy's Metropolitan Poor Act, 1867, should be extended to the rural districts. It was further resolved that a determined attempt should be made so to modify the Medical Officers' Superannuation Act that hereafter it should be compulsory on the authorities to grant such superannuation after a defined period of service.

In the course of the discussion which took place the opinion was expressed that were the Association to succeed in securing the entire payment of salaries from the Consolidated Fund, all the various grievances under which the Poor-law medical officers have so long laboured would speedily be removed, and that a great step towards the successful realisation of that object would be achieved could it be shown to the Local Government Board and to Parliament that the service was united in demanding this just and needful requirement. It was also decided to convene a general meeting as soon as the House of Commons had settled down to business, the day and hour for holding which would be announced by circular notice to members.

DISCUSSION ON CANCER AT THE PATHOLOGICAL SOCIETY.

THE following are the heads of Mr. Campbell De Morgan's paper on Cancer to be read before the Society on Tuesday, March 3rd.

The question proposed for discussion is the relations of cancer to the organism generally, and to other morbid growths.

The histology of the disease will be only considered in so far as it aids the purpose of definition.

The treatment of the disease will not be entered upon unless for the purpose of illustration.

The opinions generally held upon the nature of cancer will be stated—viz., that it is a blood disease; a so-called constitutional disease; a local disease; a combination of local and blood disease; a combination of local and constitutional disease.

The view proposed to be maintained is—That the disease, while presenting certain special characters, does not differ essentially in its mode of origin from many or most other morbid growths. That there is no evidence of the disease being caused by, or dependent on, a special condition of either the fluid or solid portions of the blood. That while the actual growth is local in its origin, there may be, and possibly always is, an antecedent of the part or of the system which favours its production. That possibly the germs of the disease may be present from the earliest period of development. That before a tumour is formed, we have no reason to suspect or anticipate the occurrence of the disease, unless, as at times is the case, some local condition be present which we recognise as often preceding the development of cancer. That where a tumour is formed we can explain its spread and recurrence without reference to an antecedent diseased condition of either the fluids or solids of the body. That the structure of cancer specially favours this recurrence, but that most morbid growths show more or less of the same tendency, and some to as great or greater extent than so-called cancer. That if a special state of the blood be a factor in the formation of cancer, we must also believe it to be so in most or all other tumours. That development of local disease determined by an antecedent condition of the system is seen in the simplest forms of tumour, as warts, e. g., and may be merely in obedience to the same law which governs the bodily and mental configuration of the individual. That the fact of retrogression of cancer, while it gives a hope that in discovering its cause we may find a remedy for the disease, does not prove a special blood origin of the disease any more than would a local degeneration of a natural tissue. This is borne out by the fact, sometimes seen, of retrogression of cancer-growth in one part, while in other parts active growth goes on.

The following gentlemen have sent in their names as intending to take part in the discussion on the paper on Tuesday evening next—viz., Sir James Paget, Mr. Jonathan Hutchinson, Mr. Simon, Sir William Jenner, and Mr. Hulke. Many other distinguished pathologists are also expected to take part, and, as the number of speakers will not be limited at all to those who have sent in their names, we may look forward to a lively and interesting discussion, and one that will necessarily occupy more than one sitting of the Society.

CAMBRIDGE URBAN SANITARY AUTHORITY.

AT a meeting of the Cambridge Urban Sanitary Authority on Feb. 17th the Rev. J. Porter, referring to the article which appeared in THE LANCET of Feb. 14th, said there was one point which did not appear creditable to the Board, and which should either be admitted or contradicted; he referred to the accusation that the testimony of the medical men had been suppressed. As the matter has been referred to a committee, we refrain for the present from any further comments on the matter, and content ourselves with placing the report of the Urban Sanitary Authority and Dr. Latham's letter to *The Times* in parallel columns, for the public to judge whether the latter gentleman's testimony had not been "suppressed or misquoted" by the Board in question.

The Report of the Cambridge Urban Sanitary Authority states that "they have received returns from all the medical men (twenty-four in number) resident in Cambridge. Of these, seventeen state that they have *no* cases under treatment. Two or three cases only have occurred in the last fortnight, all the previous cases being convalescent. There are five cases only from the town remaining in hospital."—Feb. 6th, 1874.

Dr. P. W. Latham's letter to *The Times*, Feb. 8th, says: "In reply to a note from the Urban Sanitary Authority received last Saturday, he stated that there were then *seven very severe** cases of typhoid fever under his care at the hospital, and that an *eighth* had died the previous day. Two of these cases were from the country, the other six from various parts of the town, and were all admitted *since the middle of January*. He presumes the Urban Sanitary Authority could not have received his reply. The seven severe cases are still under treatment."

* The italics are our own.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 28, 1874.

THE appointment of Mr. SCLATER-BOOTH to the Presidency of the Local Government Board will unquestionably in several respects commend itself to the medical profession; and it may be hoped that, notwithstanding a previous official experience as Parliamentary Secretary to the Poor-law Board, he may escape the error which proved so fatal to Mr. STANSFELD'S public-health work. Above all things, there is now wanted at the head of the Local Government Board a man who can conceive of the functions of that Board in the sense entertained by the Royal Sanitary Commission when suggesting its formation. From beginning to end of his period of office Mr. STANSFELD entertained no higher view of his public-health duties than that they were mere extensions of Poor-law functions. He never grasped the idea of the Royal Sanitary Commission that he had in charge "two distinct though correlative departments"; and, in consequence, he missed the essential point of the Commission's recommendations on this score—namely, the administration of sanitary matters as one sub-department, the administration of Poor-law matters as another sub-department. Mr. STANSFELD, in fact, merged the sanitary in the Poor-law administration, to the utter destruction of sound sanitary work.

To Mr. SCLATER-BOOTH is given the great opportunity of relieving the central sanitary administration of the kingdom from the opprobrium which has been brought upon it by Mr. STANSFELD, and of rehabilitating that administration in the sense proposed by the Royal Sanitary Commission. The task is no light one, for it cannot be concealed that the vagaries of local sanitary organisation which have been brought about by Mr. STANSFELD, and for which his policy was directly responsible, must for the present be left untouched. But there should be no insuperable difficulty in at once putting a stop to those follies of administrative advice which characterised Mr. STANSFELD'S presidency, and out of which the vagaries referred to came. The one thing needed is that the new President should rise above the departmental considerations, traditional and routine, which appear to have so thoroughly influenced Mr. STANSFELD; and that he should become, what the Royal Sanitary Commission intended he should become, equally a Minister of Public Health and of Poor Law.

AMONG the still disputed topics in electro-therapeutics is the question of the local treatment of morbid states of the central organs of the nervous system—treatment, that is, by influencing the nutrition of the brain and spinal cord directly by the application of electricity to the skull and spinal column, or indirectly by the electrical stimulation of the sympathetic nerve. For the first of these purposes the battery-current is alone employed, induced electricity possessing too little diffusive or penetrative power. The therapeutic problem resolves itself into two questions: Are the brain and spinal cord accessible to direct electrical stimulation?—and if so, is there sufficient ground for believing that such stimulation can effect any change in their organic state?

To the first of these questions, still often asked in a tone of scepticism, recent investigations—of BURCKHARDT in particular—have furnished a satisfactory reply. If two needles, insulated except at their points, be passed into the brain of a subject through holes bored in the wall of the skull, and be connected with a galvanometer, deflection of the magnetic needle is obtained when the electrodes of a battery are placed one on each side of the skull. The amount of deflection is proportioned to the number of cells employed. A similar result can be obtained in the case of the spinal cord, the needles being introduced from the front, and the electrodes applied over the spinous processes. In the living subject analogous evidence can be obtained. The feeling of giddiness when the head is included in a galvanic circuit may be referred, with much probability, to its direct action on the brain; and, by the application of a strong current to the lumbar region of the spinal column, contractions can be produced in the muscles of the legs. There can thus be no question that the central organs are accessible to electrical stimulation. The amount of such stimulation bears, however, in the case of the spinal cord especially, but a small proportion to the strength of current employed; and whether on the living subject a current can be used strong enough to produce any change in the nutrition, or even in the function of the cord, is a question admitting of grave doubt, and to be answered only upon other grounds. The indirect treatment of central maladies is by galvanic stimulation of the cervical sympathetic. That the sympathetic in the neck can be directly excited by the local application of the constant current may be considered, from analogy, as probable; but proof of its occurrence is still wanting. None of the physiological effects of the sympathetic action have been thus obtained; and the only evidence of its occurrence is afforded by certain reflex contractions and certain alleged therapeutic results when the electrodes are applied on its situation—effects which have been attributed by other observers to the simultaneous excitation of other adjacent nerves.

Turning to the therapeutical applications of this influence on the central organs which we have been describing, we meet some startling discrepancies between the conclusions reached by different observers. According to many, indeed to most foreign authorities on medical electricity, the influence of the constant current over diseases of the brain and cord realises fully the anticipations which the experiments alluded to suggest. Direct galvanisation of those organs or of the sympathetic nerve will, according to their statements, restore degenerated tissue, and remove or greatly lessen the symptoms of such diseases as cerebral softening, tumour, clot, of locomotor ataxy, or of progressive muscular atrophy. Such statements find a place in almost every foreign text-book on the subject, and examples of these diseases cured by this means are frequently given. Yet in this country and by many abroad this method of treatment, with whatever care employed, has, as a rule,

been followed by no improvement, or only the slightest, that could fairly be ascribed to the remedial agent.

In no diseases is it more difficult to obtain the conditions of an accurate therapeutical experiment than in diseases of the nervous system, acute or chronic. In the former, as in other acute diseases, a certain intensity having been reached, the spontaneous tendency to recovery or improvement obscures the effect of the remedy employed. Chronic diseases, moreover, present another source of fallacy in the peculiar variations they manifest from time to time, the result of influences, sometimes external, but not always obvious. In such diseases it is common to find that the employment of any new remedy is followed for a time by amelioration in their symptoms, occasionally to be recognised by the observer, more frequently existing only to the sensations of the patient. This effect is the greater the more powerful the impression is which the new remedy produces on the mind and sensations of the patient, and these conditions reach their highest point in the case of such a remedy as electricity. Such improvement is, as a rule, only transient, and the malady soon resumes its previous state. In a large number of recorded instances, moreover, the simultaneous employment of internal remedies has destroyed the value of the evidence the cases are supposed to afford of the beneficial effect of electricity upon the central organs. These facts must not be forgotten in estimating the value of the alleged results. It may seem ungracious to suggest that observers of acknowledged ability have allowed such obvious sources of fallacy to invalidate their conclusions, but the inference seems to us to be in many instances irresistible that such has been the case, and that much, if not the whole, of the alleged immediate influence of electricity on the brain and spinal cord in organic diseases is to be regarded as destitute of scientific foundation.

THE first half-yearly Report of the Medical Officer of Health for the Port of London, Mr. HARRY LEACH, just issued, is a document of more than local interest. It deals not only with the sanitary organisation of the biggest port in the world, but also with general questions of port sanitary work suggested by a long experience of ships and sailors. As we anticipated, from the moment that the sanitary requirements of the vast amount of shipping passing to and fro in the eighty-eight miles of water-way entering into the port, and moored in the 488 acres of dock-space on the banks of the river, could be systematically studied by a competent medical officer, the difficulties which were believed to be peculiar to sanitary work in the port of London would begin to diminish, and would probably presently pass out of sight. We have never under-rated these difficulties; but they were difficulties contingent upon vastness rather than upon peculiarities of traffic; and, practically, they resolved themselves into a question of expenditure. We confess, however, that we were hardly prepared to find how simple the whole question would become in the hands of Mr. HARRY LEACH. Having a thorough previous knowledge of the essential matters entering into his new duties, he has brought this knowledge to bear upon the difficulties of his post; and he is now thus early able to submit a scheme to the Port Sanitary Authority for the complete sanitary organisation of its district. This scheme is simple, consistent, and we think, singularly economical of men and means having regard to the sanitary exigencies of the port. We can have little doubt that it will be accepted substantially by the Corporation, and that it will be carried into effect as occasion may require. We cannot pretend to discuss the details here; but there are two or three intercurrent questions which deserve notice.

The sanitary work of the port, at present, resolves itself into two principal questions: first, that which relates to the inspection of foreign shipping entering the Thames from places infected with cholera, under the Order of the Local Government Board, July 17th, 1873; and next, that which relates to the inspection of all shipping in the port, whether home or foreign. For both these purposes hospital accommodation is required in the event of contagious sickness being found on board. To meet the requirements of the Order of the Local Government Board, the Corporation has at Gravesend an old man-of-war hulk lent for the time being by the Admiralty. To meet the requirements as to contagious sickness under the Sanitary Acts the Corporation has not as yet made any provision. Now, Mr. LEACH is of opinion that the Port Sanitary Authority should be entirely independent of extraneous aid, and should have the means of isolating patients either at the mouth or in the heart of the port. He recommends, therefore, the establishment of two small floating hospitals—one to be moored at Deptford, the other at Gravesend. The *Rhin*, the hospital ship now off Gravesend, is ill-adapted for the purpose, and too large. Mr. LEACH would have two hospital ships, fitted for from sixteen to twenty patients—such as might be formed from an old gun-boat, or, better in every respect, such as might be readily built for the purpose at a comparatively slight cost. To aid the judgment of the Port Sanitary Committee on this subject, he gives, in an appendix, diagrams of the floating hospitals which have been constructed on the Tyne, at Lowestoft, King's Lynn, and Dublin.

As to the floating hospital at Deptford, however, Mr. LEACH offers an alternative suggestion—namely, that if the Committee should object to a floating hospital in the upper portion of the port, it should secure a plot of ground within the precincts of the Deptford cattle market, on which might be erected a hospital hut, and which might be made available for the hutting or encamping of emigrants in the very likely event of infected groups again coming into the river.

We entirely concur with Mr. LEACH in his condemnation of the *Rhin*, and in advocating a better-fitted and smaller hospital ship for the entrance of the port. But in respect of a hospital ship for the heart of the port, we would say, whether this recommendation be adopted or not, that the Port Sanitary Authority will be well advised to secure, if possible, a plot of ground for its own especial uses within the Deptford cattle market. Numerous occasions will occur in epidemic periods when such a plot will be invaluable for the purposes indicated by Mr. LEACH, and when its possession would obviate much trouble, cost, and mischief.

The futility of the inspections carried out by the Customs in respect of ships coming from ports infected by cholera was made abundantly obvious by the events of the different introductions of cholera into London last year. Mr. LEACH

gives other illustrations of the inefficiency of this inspection for the purpose which it is intended to secure; and he suggests a special medical inspection of such ships on their coming into port. The practicability of this suggestion must be determined by the Customs and the Port Sanitary Authority. Mr. LEACH offers no recommendations on the subject; but we may observe that an inspection of the kind indicated is necessary, if the preliminary examination of a ship is to be of any real value. We would add that, if it should be found impracticable to institute such an examination in all cases off Gravesend, the difficulty, we have no doubt, can be met in other ways.

Not the least interesting part of Mr. LEACH'S report are the pages he devotes to suggestions as to the qualifications of port medical officers and port sanitary inspectors. These, we trust, will be printed in a separate form for general use.

WITH reference to an article which appeared in our issue of the 14th inst., relative to the want of uniformity in reports of medical officers of health, we are glad to observe that this subject is about to be considered by the Society of Medical Officers of Health. At the meeting of that body on Saturday evening last the following resolution was moved by Dr. T. O. DUDFIELD, seconded by Dr. TRIPE, and adopted: "That it be referred to the Council to consider as to the desirability of the statistical returns in the annual reports of the metropolitan medical officers of health being based upon an uniform system; and to frame suggestions for carrying out such a system, if found to be desirable." The possibility of any reasonable person entertaining a doubt as to the desirability of such an effort being made may surely be regarded as out of the question. What can be more absurd than the state of things at present obtaining? Hardly any two of the metropolitan health officers present their statistics in a form admitting of ready comparison; only a few seem to understand the elementary principle that the value of observed facts as a basis of deduction is proportionate to their comprehensiveness. A want of precision in the application, not only of statistical deductions, but sometimes in the mere use of terms employed by statists, is often noticeable; and on the whole (with perhaps an exception here and there) the reporters may be said to stand greatly in need of instruction by a competent authority in all that pertains to a right use of statistics. So far back as 1869 we drew attention to the independent character of these health reports, and we remarked then upon the fact that not only in respect of the information given, but even as to the period comprised within the sanitary year—one closing in March, another in September, and so on—and the promptitude or otherwise with which the reports were brought out, was there an entire absence of uniformity. Some little amendment there may have been since then, but the field for improvement is yet comparatively untouched, and we rejoice that an earnest labourer like Dr. DUDFIELD has taken it in hand. He will find that the only way of dealing with the subject effectively will be to get a small sub-committee of health officers appointed, choosing only those few who have shown their competence to handle statistics, and then let these seek the advice of such medical statists as Dr. FARR, Dr. G. BUCHANAN, Dr. BALLARD, and Dr. DYKE. In this wise they may hope to devise a uniform system of health statistics, applicable not only to the metropolis, but throughout the country, and thereby render possible a collation of facts now quite unattainable.

Medical Annotations.

"Ne quid nimis."

COOMASSIE TAKEN!

AFTER some hours of very grave misgiving in the public mind, the telegram from Sir Garnet Wolseley, announcing that Coomassie had been captured, has removed what was fast becoming a source of the utmost anxiety. The capital of the Ashantee kingdom was reached on the 5th inst. after five days' hard fighting, which was attended with the loss of many brave officers and a relatively large number of men. Contrary to the expectations of most people, the Ashantees have proved a more formidable enemy to our army than the climate; and England will have to mourn the loss of many a brave fellow belonging to its finest troops. The casualties, beyond those of officers, are stated to be under 300; but it is a subject of congratulation that the wounded are doing well, and that the health of the troops is generally good. The campaign has, therefore, ended; and Sir Garnet Wolseley's military reputation, already great, will have received additional lustre from the successful issue of his very difficult undertaking. A portion of the 23rd Regiment remaining on shipboard off Cape Coast Castle was found to be suffering in health, owing to the confinement and, probably, depression from disappointment at not having disembarked and taken part in the march to Coomassie; and it is understood that upwards of 100 of that corps are on their way to Southampton, and their arrival may shortly be expected. The Army Medical Service in this country have all along adhered to the opinion that a campaign on the Gold Coast could be undertaken, on sanitary grounds, with a reasonable prospect of success, if the period of the expedition were not extended beyond the end of March, and if the arrangements were properly carried out; and the correctness of their judgment has been fully ratified by the course of events. Considering the very grave responsibility incurred by the highest military medical authority in expressing this opinion at a time when a contrary feeling was almost universally entertained, we think he deserves much credit for his judgment. We believe that we are simply iterating the opinion of everyone concerned when we state that the sanitary, medical, and invaliding arrangements of this "doctors' war" have been both admirably conceived and executed.

SIR GEORGE BURROWS, BART.

HER MAJESTY'S bestowal on Dr. George Burrows of the honour of a Baronetcy, which was first announced in THE LANCET of last week, and has since been confirmed by authority, arose, we understand, from a desire on Mr. Gladstone's part to pay a compliment to the medical profession through one of its most distinguished members. The profession, as we have already indicated, will have but one feeling, and that an agreeable one, at the honour done to an able and accomplished brother. Sir George is a son of the late Dr. George Manns Burrows, and was educated at Caius College, Cambridge, where he graduated B.A. as 10th Wrangler in 1825, and proceeded to the degree of M.D. in 1831. He was a Fellow and Mathematical Lecturer of his College, and in 1832 was elected a Fellow of the

Royal College of Physicians, of which he is now President. Sir George studied at St. Bartholomew's, where he is now Consulting Physician, his appointment as Physician dating forty years back, while he has long held the Lectureship on the Principles and Practice of Medicine. He is Physician-Extraordinary to Her Majesty; is a member of the Senate of the University of London; was late President of the General Medical Council of Education, of the British Medical Association, and of the Royal Medical and Chirurgical Society; and has been Gulstonian, Croonian, and Lumleian Lecturer at the College of Physicians. Among his contributions to medical literature are "Disorders of the Cerebral Circulation," the articles "Hæmorrhage," "Scarlatina," and "Rubeola," in the Library of Practical Medicine, and many papers in the Medical and Chirurgical Society's Transactions.

ROYAL COLLEGE OF PHYSICIANS.

AT the Comitia on the 19th inst. there was a good deal of discussion respecting a matter of great interest to the College. The exterior and the roof of the building appear to have fallen into serious ill-repair, not to say dilapidation, and a large sum of money will have to be expended in putting things right. It was agreed at last that an appeal for voluntary subscriptions for this purpose should be made to the Fellows at large; and it appeared that in recommending this course the Council were only following out the precedent set at the time when the present building was erected. A good deal of surprise, however, was caused by the Council's report, because it dwelt on so trivial a matter as the republication and continuation of the "Roll" of the College, as if it were on a par with the vitally important question of putting the College buildings in sound repair. It seems to us that the publication of the "Roll" is a matter which might be postponed for a very long period, if necessary, without serious consequences to anyone.

Some little interest and excitement were caused by the announcement of the registrar that he had detected an individual as having personated someone else at the College examinations. The personator, it seems, was a "qualified" and practising medical man; but he added to the heinousness of his fault by actually failing to pass the examination! He is to be handed over to the General Council to deal with; and the least that can happen to him is that he will be ignominiously struck off the Register for "infamous conduct."

The proposed memorial to the Prime Minister respecting overcrowding in the dwellings of the poor was brought up in draft and approved, and we are glad to observe that the College requested the President and Censors to present it in due form to Mr. Disraeli. Coming just at this critical time, we cannot but hope that it may in some measure assist the Ministry in making up their minds to deal in a strong and masterly way with this and other sanitary questions.

The amended scheme for the Conjoint Examinations was also before the College, as to which we have already said some few words. Owing to the lateness of the hour, it was agreed to postpone the consideration of this important document to the next Comitia.

THE CONTINUOUS CURRENT.

MEDICAL men have now at their disposal, when they wish to use this current, Gaide's apparatus, or the one lately constructed by Mr. Foveaux, of the house of Weiss and Son. Both seem to offer advantages; but, as regards size, the instrument lately presented to the Academy of Sciences of Paris by M. Trouvé seems to carry the palm. It remains to be seen whether it will prove sufficiently powerful for medical purposes. For forty elements it measures but seven cubic inches, and ten cubic inches for eighty elements. Each of the latter is composed as follows:—Between two discs, one of copper the other of zinc, which form the electrodes, are placed round pieces of blotting-paper, or any other porous substance. The inferior portion of these pieces (the width and height of which are equal to about fifteen pieces of two francs piled up), should be first saturated with sulphate of copper, the other half is likewise to be saturated with sulphate of zinc. When the apparatus is to be used all the elements should be for a few seconds plunged into ordinary water. The latter being absorbed by the blotting-paper dissolves the sulphate of copper and the sulphate of zinc, and thus is produced the current by chemical reaction. The elements will retain their moisture as long as they remain in the trough of hardened india-rubber which forms the lower part of the box. Left for a couple of days exposed to the air they will dry perfectly, and remain inactive for an unlimited period. This pile will thus be useful not only to specialists, but also to practitioners who may use it at long intervals. It is as powerful as the piles of Daniell, but much more economical. When it is to be charged again, the elements need but be plunged half way into a solution of sulphate of copper, since the sulphate of zinc is continuously being regenerated. The apparatus is supplied with a collector, a galvanometer, invertor, &c.

THE SANITARY RESPONSIBILITIES OF THE BOARD OF TRADE.

IT was not unnaturally anticipated that Sir Charles Adderley would, on the construction of the new Ministry, have been offered the Presidency of the Local Government Board rather than of the Board of Trade. All antecedents pointed in the direction of Gwydyr House, but Mr. Disraeli "disposes," and the baronet will doubtless find, among Mr. Plimsoll's marine proclivities and the diurnal reports on railway accidents, plenty of work to do. But if the new president clings to his "old love," he will find also that the Board of Trade, though an eminently commercial department, has many and grave sanitary responsibilities chiefly connected with mercantile marine matters. The Merchant Shipping Act of 1867 contained several important "health" clauses, one of which indicated a proper supply of genuine antiscorbutics on every long-voyage vessel; another ordained a proper amount of cubic space for each sailor; and a third gave owners and masters an opportunity of sending to sea sound and healthy crews, and so practising a very important means to ensure the safety of their ships at sea. The clause first referred to has worked so well that the Duke of Richmond's Act may be credited with the diminution of scurvy in our mercantile marine by 75 per cent. The second clause has also worked, and continues to work well, although, as we think, something more might be done as to the quality of accommodation provided for ships' crews. But that clause which refers to the medical inspection of seamen is permissive only, and for this reason, as we suppose, is, and has always been, a dead letter. We indicated last week that this question should, and, as we are informed, probably will, form one of the subjects on which evidence will be taken before the Royal Commission on unseaworthy ships.

The Board of Trade has, moreover, sanitary responsibilities arising out of the conduct and direction of emigration business. We alluded to this important subject in our Report on Emigrant Ships that appeared in the autumn of 1872; and in the summary of that Report we indicated that the medical officers who inspect the emigrants should have extended duties, and be saddled with a far greater amount of

responsibility. We have reason to know that some of the suggestions set forth in that Report have been adopted, and that an attempt is now being made by the Marine Department of the Board to ascertain the sort of professional men sent out in charge of emigrants. There can be little doubt that this is eminently necessary. Not many years ago the sea was looked upon as a refuge for the very destitute of our profession, and the ship's doctor was always (and too often justly) associated with beer and brandy. But as many more people now go down to the sea in ships, and have business (or pleasure) on the great waters, a demand has naturally arisen for a better quality of professional article; and it is as much the duty of the Board of Trade to see that this article is really supplied to emigrants, as it is of the Admiralty and the War Office to see that skilled medical aid is furnished to the navy and army. Sir Charles Adderley may, with the valuable assistance and vast information of his marine secretary, Mr. Thomas Gray, do as much as was done by the Duke of Richmond in 1867 to improve the sanitary condition of our vast floating population.

THE INDIAN FAMINE.

THE total population of the districts threatened with famine in India is estimated at 25 millions, and it has been assumed as possible that provision will have to be made for the subsistence of two millions and a half of people for a period of seven months. The Indian Government is fully alive to the stupendous nature of the task before it, and is doing its best to perfect the necessary organisation. As we have said, the difficulties to be encountered are such as people in this country scarcely realise. It is, perhaps, to be regretted that the organisation for collecting subscriptions in this country was not commenced earlier; but the fact is that it is still beyond the power of anyone to gauge with an approach to accuracy the probable extent of the requirements. That great distress and much sickness and loss of life, under the most favourable circumstances, will inevitably ensue, is, we fear, what must be anticipated. The transport, collection, and distribution of food over such a vast extent of territory so as to meet the requirements of the native village populations, will call for the clearest-headed and most energetic administration. The Viceroy has the character of being a systematic and indefatigable worker, and his efforts will be seconded by that class of very able subordinates which are always to be found in India. As far as "Home Rule" is concerned, the present head of the India Office is universally allowed to be a man of the greatest capacity as an administrator.

THE METROPOLITAN ASYLUMS AND THEIR COST.

Now that we are all hoping for a worthy recognition by Government of the supreme importance of public health, it may not be unprofitable to consider for a few minutes the reports of the Metropolitan Asylums Board, including the monthly report of the Stockwell Fever and Small-pox Asylums, and of the Leavesden and Hampstead Imbecile Asylums. There are two aspects of facts contained in these reports—the financial and the human,—and in either view they ought to have the attention of the public and of Government. The sum of the annual bill for this sickness and imbecility among the poor is £78,645, the details of which are as follows:—Payment of interest and principal on loans, £18,000; the office and law expenses and salaries, £1900; the Leavesden Asylum for Imbeciles, £19,000 (weekly cost per head 5s. 3d.); Hampstead (imbeciles), £7645 (weekly cost 6s.); Caterham, for imbeciles, £23,000 (weekly cost 5s.); Homerton Asylum, for fever and small-pox, £4550 (weekly cost per head £1); Stockwell Asylum, £4550 (weekly cost per head £1). The difference in the weekly cost of an imbecile and of a fever patient is noticeable, and not without its significance. The human side of the account is still more painfully interesting. Of the fever cases, a more considerable number were typhus than seems reasonable, when we consider the mildness of the winter and the sufficiency of employment. Twenty-nine cases of typhus were admitted at Stockwell and twenty-three at Homerton. The largest number of cases of typhus came from Greenwich Union; the next largest from Holborn and St. Marylebone. Of the enteric admissions, there were nineteen at Stockwell and twenty-three at Homerton. Of small-pox cases, only two had been received at Stockwell, while fifteen had been admitted at Homerton. Of scarlet fever cases, nine were admitted at Stockwell and fifteen at Homerton. The Board decided, in view of the comparative freedom of London from epidemics at the present time, to procure plans for the erection of a brick structure at Hampstead in place of the temporary structure of iron and wood. Considering the advantages of an extemporised hospital, we rather regret to hear of the determination of the Board; but the expense of repairs, and the fact of the materials being such as not for long to resist weather and protect from changes of temperature, is the alleged reason. It seems as if we wanted a little longer experience of temporary structures.

LIGHT AT LAST.

COMMENTING on the utter disorganisation of the Liberal party, especially on the extreme left, "A Radical" correspondent of the *Pall Mall Gazette* sees but one "platform" on which the *disjecta membra* can meet, unite, and reopen the campaign. The time, he thinks, is not yet come for compulsory secular education, for the disestablishment of the churches of England and Scotland, or for any sweeping alteration in the laws relating to land. But "there is one matter in which we Englishmen are solving a problem, not only for ourselves, but for the rest of the world. The misery engendered by filth and overcrowding in our great cities is such that almost any change must be an improvement. I will confess that at the late election I gave every vote I had for Conservative candidates, and I will venture to say that, could the ballot-papers be truly deciphered, many another Radical would be found to have done the same." The Nemesis which we always maintained would alight on the Gladstone Government for its neglect of sanitary reform descended at last, and, as "A Radical" points out, from the friendly as well as from the hostile side. The writer joins us in reminding Mr. Disraeli that the improvement of the dwellings of great cities is a measure which he and his party are pledged to promote. Should he forget his promise, then, adds the writer, "it will be worthy of those who call themselves the Party of Progress if they for once consent to sink their individual differences, and persistently support the man, whoever he may be, who attempts to deal adequately with this great subject." In other words, Radical opposition will be disarmed should Mr. Disraeli but be true to his sanitary programme.

THE SIAMESE TWINS.

ONE of our daily contemporaries thinks it a duty incumbent upon us to satisfy the public mind by an authoritative statement respecting the anatomy of Chang and Eng, the Siamese Twins. We would if we could readily comply, but as yet no scientific report, properly drawn up and authenticated, has been submitted to the profession. The simple truth on the subject, in so far as it is known up

to the present time, is that a medical committee has been formed for the purpose of conducting a careful anatomical examination, but that its proceedings have been delayed and rendered difficult by the desire of the friends of the late twins to make the best possible terms for themselves. It is stated, moreover, though we believe there is no authentic evidence on the matter, that the anatomists are so to conduct their inquiries as to leave the bodies of the twins intact for after-exhibition, as bodies skilfully embalmed. If this be true, we fear that some further difficulties will lie in the way of a correct exposition of the anatomical relationship of the two bodies as they existed during life, for we know practically that nothing is more difficult than the two processes, whenever they are attempted, of conducting a successful post-mortem examination of a dead body and afterwards embalming it so perfectly as to make it retain its natural form and semblance. We shall nevertheless wait with expectation the official report of the anatomists who have undertaken the research. The statements that the bond of connexion between the twins contained no connecting vessels, and that it might have been divided during life without serious risk, is now met by the counter-statements of the existence of a vascular connexion so perfect that injection of the mesenteric vein in one subject charged the venous system of the other, and that severance of the bond while the twins lived would have proved immediately fatal. These statements must be accepted at present *cum grano salis*, but if there be an inclination of evidence in favour of either statement, it would be with the last named. The rapid death of the twin who lived longest is favourable to the view that some vital connexion held the men together and rendered their lives dependent the one on the other. On this, as on all other points, we must, however, wait for further and more accurate information than has reached us up to the present time.

A PIECE OF PRACTICAL SANITATION.

IN these days of co-operation schemes, it is surely a good idea for medical men to co-operate in their efforts against contagious diseases. That indefatigable public servant, Dr. Trench, the Medical Officer of Health of Liverpool, has addressed a letter to Dr. Cameron, President of the Medical Institution of the same town, which contains some excellent and practical suggestions for checking the progress of such diseases. Dr. Trench, by direction of the Health Committee, invites the aid and co-operation of his professional brethren in a united effort to render the system of disinfection established by the Council of Liverpool more generally available. In 1865, the Council erected, at great cost, apparatus for the disinfection, by heat, of the bedding and clothing of the sick, on the principle and plan advocated by Dr. Henry, of Manchester, in his well-known papers published in the *Philosophical Magazine* in 1831. One of these apparatus is situated at the north, and another at the south end of the town; and Dr. Trench states that the system has now been in practical work for nine years, during which time more than 330,000 pieces of infected bedding and clothing have been subjected to the influence of dry heat, with the most satisfactory results. It is obvious that attempts at arresting the progress of a disease can only be successfully undertaken, in a large town, whilst the cases are still few and scattered and under control; but it is, unfortunately, under the influence of the alarm created by the great prevalence of disease that the public avail themselves of the preventive measures at their command. The Health Committee invites the co-operation of the medical profession in its warfare against disease, and solicits suggestions from them as to the methods that would prove most facile and least irksome to themselves. Meanwhile, the medical officer of health points out that immediately on receipt of a post-card or other intelligence of the existence of contagious disease, an inspector will visit the house, remove all infected clothes and other articles, for subjection to a dry heat of 212° F. for eight hours, during which time the room will be fumigated by sulphurous acid gas. Everything connected with carrying out these processes of disinfection is done by the servants and at the expense of the Health Committee, who have even gone so far as to reimburse the relatives of a patient for any loss caused by any accidental injury that may have occasionally ensued.

CAN A SURGEON RECOVER APOTHECARIES' FEES?

THE construction of no Act so much as that of the Medical Act seems to be at the mercy of County Court judges. The questions raised are not often taken to superior courts, and if they are, the judgment of the superior court does not seem to percolate down to the lower one. Recently, at Sheffield, the power of a surgeon to recover fees as an apothecary has been raised before the Sheffield County Court judge. The *Standard* thus states the point in dispute. It was "whether a surgeon or a licentiate of the College of Physicians was entitled to charge as an apothecary, he not being a member of the Apothecaries' Hall." The judge said he should give a verdict for the amount claimed, because the action was undefended, but in his opinion a person holding qualifications such as those held by plaintiff was not entitled to charge as an apothecary. A licentiate of the College of Surgeons was a member of an honourable profession, but a person who compounded drugs as an apothecary was a member of a trade. We should be glad of fuller particulars in this case. If the learned judge means that no practitioner save one holding the licence of the Apothecaries' Company may charge reasonably for medicines, we differ from him, and he is at variance with the opinion of good counsel on the point. Both those holding surgical qualifications and those holding medical ones are entitled to recover the cost of medicines supplied to patients, and to reasonable charges for professional aid and advice, unless forbidden to dispense or to sue at law by the bye-laws of their College. The only condition is that the cases claimed for accord with the legal qualifications of the suitor. The law recognises the right of *a surgeon* to supply medicines and charge for them in a surgical case, but in that only.

THE ROKITANSKY FESTIVAL.

THURSDAY, the 20th, witnessed the celebration of Rokitansky's seventieth birthday in the hall of the Academy of Sciences in Vienna. *Savants*, soldiers, and men of every kind of distinction were present, when, at 11 A.M., the proceedings began with a short address from his Excellency von Schmerling, the curator of the Academy of Sciences. He was followed by the Dean of the Medical Faculty, who delivered the *Festrede*, at the conclusion of which two curtains were quickly drawn aside, and disclosed in a bend in the wall a bust of the veteran Rokitansky, tastefully imbedded in a background of foliage. The repeated rounds of cheering that the sight elicited having died away, a *jubilate* was sung by the Academical Musical Society, which was followed by the presentation of the addresses—thirty-four in all—of the deputations from the scientific bodies of Vienna, from the city itself, and from the Universities of Prague, Cracow, Pesth, Gratz, Innspruck, and Klausenburg. Lower Austria, Hungary, Moravia, Berlin, Constantinople, London, and Presburg were also represented through their

learned societies. When the last address was delivered, Rokitansky rose amid general applause, and returned his acknowledgments in his brief, quiet, effective manner, after which another song was sung by the Musical Society, and the proceedings—exactly of two hours' duration—were brought to a close. In the evening the students, to the number of 1500, marched in torchlight procession through the densely crowded Ringstrasse to the Cursalon, where Rokitansky was being entertained at a grand banquet. Drawing up in a circle in the garden opposite, they sang some songs, after which Rokitansky appeared, amid a burst of cheering and waving of torchlights, the snow falling at the time adding to the weird effect. By 9.30 P.M. all was quiet, and so ended the celebration of the seventieth birthday of Rokitansky.

SHIRLEY BROOKS.

FEW contemporary journalists were more popular than Mr. Shirley Brooks, and this for many reasons. A typical Englishman, with the humour, the heartiness, the health of mind and body that belong to the character, he was a perfect man of the world, a brilliant conversationist, and an accomplished man of letters. Whether in his person or in his books, he was a delightful companion, full of sense and satire, the interplay of which relieved the former of its hardness and the latter of its acerbity. As a writer of books and dramas he has already received his due estimate, and that a high one, in the appropriate quarters, but as the Editor of *Punch*—that symbol of British freedom, as Lord Brougham called it—he deserves from us a special acknowledgment. Under his management that widely-read organ was always on the side of philanthropy, and on the many occasions when we have had to impress lay auxiliaries we found Mr. Shirley Brooks ever ready to bring his light artillery into action, or to turn the enemy's flank by a brilliant sally. To us his death is a distinct loss; and it will be long before we can forget the many pleasurable hours we have enjoyed from the genial humour, the neatly-turned epigram, and the philanthropic manhood that are buried in the too early grave of Shirley Brooks.

OVERCROWDED ASYLUMS AND THE REMEDY.

WHETHER insanity be increasing in a greater ratio than population is a moot point. But that it increases at an equal rate with population is admitted. And the consequence is that in some counties the asylums are overcrowded. A very interesting correspondence on this subject is published in the *Sussex Advertiser* between Dr. S. W. D. Williams, of the County Asylum, Hayward's-heath, and the guardians of Hailsham. Dr. Williams holds that the only way of keeping the tendency to fill asylums and the consequent demands upon the ratepayers within reasonable limits is to weed the asylums of harmless and chronic cases, sending them back to their friends, or to the workhouses, according to circumstances. He has found—contrary to the usual opinion—that the poor are more willing and anxious to have the personal care of their insane relatives than those in higher classes of life. Scarcely a week passes but he is earnestly solicited to relegate patients to the care of relatives. Acting upon this experience, 100 chronic lunatics—nearly 15 per cent.—have been returned to their homes or to workhouses over and above those discharged as cured. In this way, though insanity increases with population in Sussex, the numbers of the asylum do not increase. It will be interesting to learn how far a further experience will justify Dr. Williams's system. One question arises of interest, in addition to the risk of entrusting insane patients to the care of relatives probably otherwise fully employed—viz., the effect upon relatives themselves of the constant association with the demented. This cannot be advantageous. It should be said that Dr. Williams urges upon the guardians and all concerned the importance of placing acute and recent cases under asylum treatment with as little delay as possible.

MEDICAL OFFICER OF HEALTH FOR CAMBRIDGE.

AT a meeting of the Cambridge Urban Sanitary Authority held on Feb. 17th the report of the General Purposes Committee recommending the appointment of a medical officer of health, at a salary of £100 a year, was read.

Mr. Hamblin Smith objected to the report *in toto*. As to the question of salary, he thought it was utterly impossible to obtain the services of a gentleman for anything like the salary proposed, and he urged that the salary should be £500 a year. After some discussion, the report was ultimately returned to the Committee for reconsideration.

At a subsequent meeting of the Town Council, Mr. Sam. Peed, chairman of the Sanitary Board, said he should oppose a salary of £500; and Mr. Bond remarked that, "if the officer were a conscientious man at that salary, he would prove a nuisance to himself and to the town." Mr. Hall, however, did not consider £500 "a bit too much for a medical officer of health, because what they wanted was a man of thorough ability, one above suspicion and corrupting influences. The labours a man would have to go through to attain such a position would be ill compensated by £500 a year."

We hope, for the sake of the town, the more liberal salary will be finally decided on. We again suggest that the University should found a chair of State Medicine, with an income of £400 a year, and the town give the holder of the chair a similar sum for his services as health officer.

We are pleased to find there are a few members on the Board who recognise the necessity of dealing thoroughly with the sanitary deficiencies of the town, and we hope their number will be increased when the Board is reconstituted. In a town like Cambridge it is a matter of considerable importance for the sanitary authority to be composed of liberal-minded gentlemen.

THE CUMBERLAND INFIRMARY.

THIS institution—so far, at least, as the building is concerned,—like so many of its kind, appears to be suffering from "growing pains," and associated with this discomfort is the usual want of the anodyne—funds. Not only are its buildings undergoing a change almost amounting to the erection of a new hospital, but its whole staff of management—medical, nursing, and domestic—partakes of the same condition of mutation consequent on the increase in the number of patients and the extended area of the premises. The east and west wings are so far completed as to be fit for the reception of patients, whilst the centre, or original structure, will, it is expected, be finished in the course of a few weeks. The cost of the alterations will amount to £11,000 odd, of which sum £9779 is paid. At the annual meeting of the subscribers held a few days since, statements were made *apropos* of the subscriptions which, for the credit of the companies concerned, we would fain hope have been by some accident or another misreported. In proposing a vote of thanks to the medical officers of the infirmary for their services, Canon Prescott "directed attention to the fact that the whole of the contributions by the railways centred in Carlisle" (seven in number, we believe) "towards the building fund were represented by the sum of £25 from the London and North-Western Company," although applications had been made to each of these companies. This fact, taken in connexion with another,

mentioned by Mr. Foster at the same meeting—viz., that 50 per cent. of the whole number of patients (surgical, we presume) come from the railways, bears an aspect which would be very mildly characterised by the term discreditable.

MUSCLES OF RAT AND RABBIT.

AT a late meeting of the Société de Biologie, M. Ranvier demonstrated that in the rat and the rabbit there are two kinds of muscles, differing as much in their aspect as in their properties. The first is represented by the white muscles, which contract instantaneously; the second by the red muscles, which act more slowly. On injecting an entire rabbit with prussian blue, M. Ranvier has remarked that the red muscles become more deeply tinted than the white, and in consequence possess a vascular system of much larger capacity than the latter. The different coloration of these two kinds of muscles is not due to any difference in the quantity of blood contained in their vessels, since they still retain their colour after the blood has been thoroughly removed by the injection of water, whilst the white corpuscles become a shade paler. After making a successful injection of these different muscles, it may be seen with the microscope that the white muscles have a capillary network with rectangular meshes, such as is described in all works on histology. The capillaries of the red muscles are much larger and form wider rectangular meshes. They present in addition ampullary dilatations which may be compared to miliary aneurisms. The small arteries are also the seat of aneurismal dilatations, which in some places are of considerable size. The red muscles, the contraction of which is slow, contain a quantity of blood which accumulates in the smaller ampullæ, when during the action of the muscle the capillary circulation is, as is well known, almost completely suspended.

OUT-PATIENTS AT ST. GEORGE'S HOSPITAL.

THE Weekly Board of St. George's Hospital lately appointed a committee to inquire into the working of the regulations under which out-patients were admitted and treated. The report of this committee, which was considered and adopted by the Weekly Board last week, introduces certain changes into the regulations which were made the subject of inquiry. No medical officer to out-patients at St. George's sees more than twenty fresh cases on any given day; and in this number all in-patients made out-patients, and all out-patients whose tickets have been "renewed," have hitherto not only been counted, but they have taken precedence of other applicants, so as greatly to diminish the really fresh cases. Under the new rules the persons referred to will no longer be reckoned, and twenty *bond-fide* new applicants will be admitted each day. The tickets given to out-patients will be in force for one month, and will then expire, unless expressly ordered to be renewed by the medical officer. In the ophthalmic department only, the inquiries into the circumstances of patients, which have been made at the suggestion of the Charity Organisation Society, will for the future be discontinued, and all applicants will be admitted. Power is reserved, however, to the ophthalmic surgeon to refer to the secretary for inquiry the case of any patient whom he may deem unsuitable for hospital relief.

LIVERPOOL HOSPITAL SUNDAY.

THE total amount now ascertained to have been raised in Liverpool by the late Hospital Sunday and Saturday collections is £11,142, of which £2178 was contributed by the industrial classes at their places of employment. The apportionment of £10,800 has thus been made among the selected charities:—Royal Infirmary, £3240; Northern Hospital, £1620; Royal Southern Hospital, £1620; Dispensaries, £1188; District Nursing Society, £756; Lying-in Hospital, £756; Children's Infirmary, £540; Eye and Ear Infirmary, £482; Homœopathic Dispensary, £216; Cancer Hospital, £108; Stanley Hospital, £108; Hospital for Infectious Diseases, £108; Dental Hospital, £54; and Skin Dispensary, £54.

The total sum raised in Liverpool since the institution of the Hospital Sunday movement in 1871 has been upwards of £34,000, each successive year's proceeds showing an increase both as regards the Saturday and Sunday collections The expenses of advertising, printing, &c., are now little over 3 per cent.

DR. LIVINGSTONE.

LIVINGSTONE'S death is confirmed, Chumah, his servant, having arrived at Zanzibar on the 3rd, and returned next day with stores for Murphy, who was ten days' journey from Bagamoyo with Livingstone's body and papers. Dr. Dillon, who had also started from Unyamyembe, shot himself in a delirious fit. Cameron has proceeded alone to Ujiji. At a meeting of the Royal Geographical Society on Monday, Sir Bartle Frere announced it as Mr. Gladstone's intention to propose to the Queen, as his last official act, that Livingstone's family should receive a pension of £20 a year. The Dean of Westminster has voluntarily proposed that the missionary explorer's remains should be interred in the national Walhalla.

THE GALVANIC KNIFE.

PROF. VERNEUIL, of the Faculty of Paris, is just now very enthusiastic on two surgical subjects: one is the dressing of wounds with cotton-wool left rather a long time upon the solution of continuity; and the other the performance of tracheotomy with a knife heated by the galvanic current. The cotton-wool dressings have been discussed in this journal; and as to the bloodless division of tissues by the galvanic knife we are bound to mention two cases brought before the Surgical Society of Paris by M. Krishaber, who distinctly states that he was not in the least pleased with the method, after having tried it upon two adults. Secondary hæmorrhage was very considerable, and the author says that this mode of operating does not diminish the dangers of tracheotomy, nor facilitate its performance.

SANITARY NOTES.

DR. JOHN SHEA, medical officer of health to the borough of Reading, has presented his first annual report to that urban sanitary authority, comprising particulars as to death-rate, zymotic diseases, nuisances, and water-supply. These particulars indicate a very insanitary condition of things in the town of reading, and it is evident that the health officer has been appointed none too soon. The report, although containing a variety of information, is fragmentary, and, as with many others, evinces the want of a guiding hand from the central department.

IN Paris, for the week ending Feb. 20th, the deaths were 48 in excess of the preceding week. Out of the total number, 398 were due to chronic disease, phthisis numbering 143; 36 to surgical affections; 16 to accidents; 8 to puerperal affections. Malignant sore-throat and cramp are now prevalent, and have caused thirty-seven deaths. There is a slight epidemic of measles, but variola is "nowhere." Typhoid numbered 23 deaths last week, while diseases of the respiratory organs figure largely, of course, in the returns.

AN election petition has been lodged against the return of Dr. O'Leary for the representation of Drogheda. Some irregularity connected with the polling booths is the reason assigned for the trial, which it is expected will take place in Dublin. Dr. O'Leary will shortly be presented with an address and testimonial, consisting of a silver tea and coffee service, by the students of the Ledwich School of Medicine and St. Vincent's Hospital, with both of which institutions he is connected, as a mark of esteem and congratulation on his being returned to Parliament.

THE Corporation of the Royal Edinburgh Asylum for the Insane held its annual meeting on Monday. The managers' and medical superintendents' reports proved the asylum to be in a flourishing condition and fully upholding its reputation. The increase in the rate of wages and price of provisions had, however, caused an excess of £300 on the income; and in order to meet the expenditure, the board of the lunatics was raised.

LORD GRANVILLE mentioned at Dover, on Tuesday night, a touching fact relating to Lieutenant Charteris's death. The gallant youth was so bent on seeing active service that, when accepted for the Ashantee Expedition, he showed his family the ordinary medical certificate only, concealing entirely a letter from one of the most eminent physicians in London, telling him that his constitution was such that it could not survive the war.

THE general opinion in France is that the disease of the vine is due to a parasite—the phylloxera. Some contend, however, that the animal is the *consequence* and not the cause of the disease. Be this as it may, the greatest efforts are being made to find means of destroying the phylloxera. The Orleans Railroad Company have just voted the sum of £800 towards defraying the expenses occasioned by the labours of scientific men in that direction.

SMALL-POX is stated to be spreading in Wigtonshire. A great many cases have occurred in Stranraer, several of which have terminated fatally. From Stranraer it has been carried to Old Luce, where it has caused some alarm. The disease has also appeared at Newton Stewart. It is satisfactory to learn that revaccination is eagerly sought for, though, unfortunately, the supply of lymph is reported to be insufficient.

THE following statement, derived from the recently published report of sanitary measures in India, shows the mortality among officers of H.M. British and Indian armies:—In the British army there were 29 deaths out of a strength of 1932, or a ratio of 15·01 per 1000; in the Indian army the ratio was 12·23 per 1000, the equivalent of 24 deaths out of a strength of 1962. These ratios are stated to be favourable as compared with the returns of former years.

A SOMEWHAT singular suit was tried at the Exchequer Court on Saturday last. The plaintiff in the case, a widow with six children, obtained a verdict with £150 damages, as compensation for the loss of her husband, whose insanity and ultimate death were proved to the satisfaction of a special jury to have resulted from nervous shock occasioned by an explosion of gas, such explosion being caused by some neglect in the carrying out of repairs by the defendant.

GREAT anxiety appears to exist in the Argentine Confederation with regard to the possible outbreak of cholera there. It would seem almost certain that the disease had manifested itself amongst a body of emigrants detained in quarantine at Ensenda, where the sanitary arrangements are stated to be of a very unsatisfactory kind.

IN Paris, thirty-seven streets, according to a Parisian contemporary, are named after medical men: Alibert, Ambroise Paré, Antoine Dubois, Bichât, De Blainville, Broussais, Cabanis, Chomel, Corvisart, Cuvier, Desgenettes, Duméril, Dupuytren, Esquirol, Fagon, Ferrus, Fourcroy, Guy de la Brosse, Guy Patin, Hallé, Larrey, Majendie, Mazet, Papin, Pinel, Quesnay, Rabelais, Richerand, Vauquelin, Velpeau, Vicq d'Azyr. The names of four foreign celebrities have been in like manner honoured: Harvey, Jenner, Galvani, and Vesalius.

IT is with regret that we have to announce the death, on the 24th inst., at Hazlemere, High Wycombe, of Philip Barnes, Esq., F.L.S., father of Dr. Barnes, obstetric physician to St. Thomas's Hospital. Mr. Barnes was the founder of the Royal Botanic Society, and the last survivor of those to whom the charter was granted—namely, the Earl of Albemarle, Sir Edward Kerrison, Col. Rushbrooke, and James De Carle Sowerby.

A MEMORIAL to Agassiz is in contemplation. At Boston a meeting for the purpose was addressed by Emerson and Professors Rogers and Wendell Holmes, after which it was resolved to make the museum of Zoology at Cambridge—the work of Agassiz's best years—a memorial monument. For this it was proposed to raise the sum of 300,000 dollars to complete its endowment; 65,000 dollars were subscribed before the proceedings closed.

A SON of the late Dr. Francis Webb is a candidate for admission into the Royal Medical Benevolent College. Dr. Webb was a highly esteemed member of the profession, and his death at a comparatively early age, leaving a widow and ten children dependent on a very slender income for support, is a fact which will, we feel sure, enlist the sympathy and interest of those who can aid in forwarding the election of his son.

THE Carlist war in Northern Spain is attended with extreme privation and misery on the part of the belligerents—the insurgents especially; and a Committee of Ladies has been formed in London to collect and forward to the sick and wounded, clothing, linen, lint, and hospital stores. The Marchioness (Dowager) of Lothian, 15, Bruton-street, will thankfully receive any contributions.

AT the last meeting of the Academy of Sciences in Paris, MM. Magitol and Legros's communication, embodying their experiments on animal grafting, excited much interest, particularly those experiments relating to the transplantation of organs in their embryonic state. MM. Magitol and Legros have been partially successful in the transplantation of dental follicles.

LORD CHARLES BRUCE presided on Thursday in the board-room of the Royal Hospital for Diseases of the Chest, over the second annual meeting of the Ladies' Samaritan Society, of which the Viscountess Clifden is the head. The Council of the hospital acknowledged the receipt of a sixth donation of £1000 from "W. P. D."

THE Committee of the Dental Hospital, London, have issued cards for a *conversazione* on Monday, the 2nd proximo, to celebrate the opening of their new building in Leicester-square. Mr. Sercombe, the President, will deliver an inaugural address.

ON Wednesday, in the Père la Chaise, a monument was inaugurated in memory of Marchal de Calir, the able editor of the *Union Médicale*, who died, about a year ago, of apoplexy.

A PRIZE has just been founded at the Academy of Medicine by the widow of Huguier. In consists of 3000 francs to be given every three years to the author of the best work, published or in manuscript, on diseases of women; more especially on the surgical treatment of those affections, exclusive, however, of accouchements.

THE Town Council of Penzance have applied to the Local Government Board for sanction to borrow £931 for works of sewerage and water-supply, for the purchase of lands for improvements, and for the provision of a hospital. An inquiry by one of the inspectors of the Board has been held, and the decision is now awaited.

Two Parisian notabilities are in a critical state of health —M. Carpeaux, the sculptor, who is suffering from stone in the bladder, and will shortly be operated on; while M. E. Littré has been very ill of bronchitis and the debility arising from an excess of brain-work.

THE Simpson Memorial will take the form of a statue to be erected in the New Town of Edinburgh. Another proposal recommends the College as a better site, the arch at the west end of the quadrangle, next the marble statue of Sir D. Brewster, being the appropriate place.

IN summarising briefly the annual report of the Seamen's Hospital in THE LANCET of the 14th inst., we did not, perhaps, indicate clearly the number of in- as distinguished from out-patients. A total of 1905 in-patients and a total of 1515 out-patients were treated during the year.

AT the last meeting of the Metropolitan Asylums Board attention was called to the number of typhus cases which had come in from Greenwich Union, and it was resolved to urge upon the authorities of that district to take measures for arresting the progress of the disease.

M. GERVAIS has been elected by the Academy of Sciences to fill the vacancy in the section of Anatomy and Zoology occasioned by the death of M. Coste.

A SERIES of articles on "The True Cause of the Potato Disease," from the pen (we believe) of Mr. Shirley Hibberd, is now appearing in the *Gardener's Magazine*.

THE death, in London, of an infant, resulting from circumcision, is recorded in the last weekly return of the Registrar-General.

ARMY SANITATION IN THE FIELD.

THE special correspondent of the *Daily News* with the Ashantee expeditionary force has invited the judgment of THE LANCET on certain points connected with the field and commissariat arrangements adopted in that expedition. We have much pleasure in affording it. *Imprimis*, let us take the question of Bohea *versus* grog. The special correspondent suggests that Captain Huysche, who has unfortunately fallen a victim to disease incidental to the Gold Coast, might have better withstood the effects of the climate had his habits been somewhat less abstemious than they were, and notably in the matter of cold tea. In an annotation last week we adverted to the question of the use of spirits in the field. Captain Huysche's death was not attributable, in our opinion, to his substitution of cold tea for spirits, but the general question having been raised, we proceed to discuss it. The indiscriminate issue of a spirit ration has been productive of much mischief in our army. There cannot be a doubt that, as a matter of experience, troops have performed very arduous duties and successfully accomplished long and fatiguing marches in various climates, without having had any recourse to spirituous liquors. Sir James M'Grigor, in his medical sketches of the expedition to Egypt, calls attention to the fact that the troops in their march across the desert, owing to the difficulties of its transit, were deprived, and with much advantage to their health, of all spirits. Sir John Hall, as the result of his experience in the Kaffir war, emphatically adds his testimony to the same effect, declaring that the healthiest army he ever served with had not a drop of spirits, and, although subject to great hardships and exposure, the sick-list seldom exceeded one per cent. Sir Garnet Wolseley's opinion, founded on his Red River experience, is well known; and the late Captain Huysche himself wrote an account of that expedition, in which he declared that it would have been a bright era in our military annals if it had only served to explode the fallacy of the belief that spirituous liquors were essential to the soldier in the field. As we have previously stated, the Americans discontinued the issue of a spirit ration in the late war. Unfortunately, light wines, and beer of the same character, are out of the question owing to the difficulties of transport, even if the British soldier could be induced to drink the former, which he cannot. While we firmly believe that Sir Garnet acted wisely in discarding the use of spirits in favour of tea, we see no necessity for altering the opinion that we expressed last week on this subject, to the effect that the soldier is frequently benefited by a moderate allowance of alcohol, and that the issue of a small ration of rum at the end of a fatiguing day's march, especially in wet and comfortless weather, and when a well-cooked meal is not readily procurable—for these are the conditions of campaigning,—may be defended on moral and hygienic grounds. We understood, too, that the medical officers were fully empowered to recommend its occasional issue.

Next as to diet generally—for it must be remembered an army marches on its belly,—at the risk of seeming to be uttering so many platitudes to army medical officers, it is obvious that the diet should be good and sound, and apportioned to the work to be done; that the more variety that can be introduced into it the better; and that—most important of all—fresh vegetables should form a constituent part of it. A very high army medical authority expressed himself many years ago to an officer who has since attained the command of an army in the field, "If ever you command an army, look to fresh vegetables as next in importance to ammunition." Six weeks' deficiency of vegetables ruined the army of the Potomac; and the sick of that army, according to the testimony of an eye-witness, were in very much the condition of our own soldiers in the lamentable and memorable Crimean winter of 1854. The field ration specially laid down for the troops on the Gold Coast is undoubtedly a good one. So many physiological differences as to appetite and diet may be observed among men that it is absurd to rule dogmatically as to what is best for individuals. There are small men with small appetites and great energy, just as there are large men with large appetites and little energy; but this much is certain, that when men work hard, physically or mentally, or both, they must be well fed, and if their time is consumed in the open air the consumption of food and its conversion from potential into realised energy is readily enough accomplished even in climates that are the reverse of stimulating to the appetite. Our soldiers' ration is deficient, under ordinary circumstances, in its nitrogenous element; but in a climate like that of the Gold Coast this would, probably, be of less importance; yet the diet requires to be varied. Physiologically the form is quite as important a feature as the chemical character of the food.

Lastly, as to bivouacking in the field. We fully endorse the opinion of the *Daily News* correspondent as to the great importance of protecting men from the ground by raising them from it. This is more essential than providing them with cover above. No military surgeon of any experience would neglect this, and we are confident that its importance must have been prominently enforced in any instructions issued

for the guidance of the sanitary officers accompanying an expedition in so malarious a climate as the Gold Coast. No doubt a soldier is the better for some cover overhead at night, however slight, but he can protect himself with his great-coat or blanket. When, however, nothing else can be procured, a water-proof to spread on the ground is a *sine qud non*, and every man of the force, we have always understood, was provided with one. When tents are used, either boarding, straw, or dried ferns, as in the New Zealand campaign, may be profitably utilised for the purpose. We appealed to a medical officer of high rank, and of very large and varied experience, as to what was done in the late American war in this respect, and he has kindly furnished us with the following note of what he observed:—"In the army of the Potomac each man was required to be raised at least a foot from the ground in a wooden bunk. In the Federal encampments around Richmond and Petersburg there stood, at my visit, the huts as they were occupied during the winter of 1864-5, with only the canvas roof removed, and in each, as well as in the large casemates of the field-works, might be invariably seen the wooden or wicker raised bed or bunk. These were constructed of boards, and in the casemates of cedar or ash poles, laid side by side and elevated; or crochets were used, or the side rails had boards of old biscuit-boxes or staves laid transversely upon them. In some places the men had woven rude straw mattresses."

Correspondence.

"Audi alteram partem."

PYÆMIA IN PRIVATE PRACTICE.

To the Editor of THE LANCET.

SIR,—The accompanying particulars of a case of blood-poisoning in private practice may be interesting to your readers at the present time.

The blood-poisoning took place after an operation for the removal of a scirrhous breast and axillary glandular mass, weighing together three pounds and a half. The patient was a stout lady, a widow of forty-eight years of age, otherwise sound. She lived in a house of moderate size, in a wide street in an elevated suburb of Newcastle. The drainage and ventilation of the house were not faulty to my knowledge. The watercloset was placed upon the stair-landing one flight of stairs below the patient's bedroom, which was on the first-floor. Nothing unpleasant was noticed from the closet about the time of the operation, before or after. There was no family in the house, and only one other room in it was occupied. The lady was attended by a married daughter, who was most active, careful, and devoted to her mother, and by a professional nurse.

The operation was performed on Aug. 21st, 1872, at midday, in the presence of several professional gentlemen—Dr. Charlton, Dr. Black, and others. From the first incision to the last application of dressing, an antiseptic atmosphere was kept floating above the patient by means of large spray-throwers worked by two assistants. The sponges used were new, and had been placed overnight in boiling water (carbolised), in which they remained all night; during the operation the sponges were dipped in carbolised water before being used; all instruments, ligatures, and sutures were similarly disinfected. The arteries were twisted.

A large wound was left after the operation; it extended from the armpit some 9 in. downwards over the chest, and required ten silver-wire sutures to bring the edges together. In spite of the large mass removed, the edges came well together. The flaps were supported by strips of Morrison's plaster, moistened in carbolised water. The whole wound was then covered with lint dipped in carbolised glycerine. The outer flap was supported by a compress, and the whole side of the chest covered in with a thick covering of cotton-wool disinfected by exposure to bromine fumes. The dressings were then fixed by a cotton bandage similarly disinfected, and the left arm fixed to the side by a flannel bandage.

The operation was well borne. The patient recovered rapidly from the chloroform, and did not suffer from chloroform sickness.

On the 22nd all seemed well. Patient composed; pulse quiet; bandages unstained.

On the 23rd at midday—i. e., forty-eight hours after the operation—the patient complained of tension across the chest. The pulse was 100. The bandages were cut, which gave relief. There was no staining of the bandage, nor the slightest moisture about the wound, which could be seen by carefully lifting the cotton-wool. Some swelling was noticed a little below the lower half of the wound. In the evening, about 9 o'clock, the patient was feverish and somewhat flushed. The wound was not disturbed, as there was no discharge or even moisture from it.

On the 24th at 8 A.M. the patient was found much flushed. She had had a restless night, had been sick in the night, and had talked incoherently. At the visit she was quite sensible, but the pulse was 120, and the temperature 103°. There was no discharge from the wound, which appeared entirely healed from end to end; but the swelling observed the day before had increased, and was evidently fluctuating. At one o'clock the patient's condition was alarming; there was anxiety and oppression; everything taken into the stomach was rejected. It was plain, in fact, that blood-poisoning had commenced. The strips of plaster were wetted and removed from over the swelling already mentioned. The edges of the wound were united. Two stitches were removed, and an effort made to pull asunder the lips of the wound at this part; the union, however, was too firm, and it was necessary to introduce the points of a pair of scissors, and so open up about an inch of the wound. An outlet was thus made by which upwards of a gill of stinking dark-coloured bloody serum was poured forth. The cavity where this liquid had lain was carefully emptied, and washed out with carbolised water (1 to 30). Means were adopted to drain the cavity, and it was dressed with antiseptic gauze dipped in weak carbolised glycerine. In a few hours the pulse was already below 100, the temperature was falling, and the sickness had disappeared.

The patient subsequently made an uninterrupted recovery.

In this case, then, the careful antiseptic management of an operation and complete adhesive union of the resulting wound were nevertheless followed by putrefaction of the bloody serum exuded into the cavity of the wound. An example is thus afforded of septic changes occurring independently of any apparent external cause.

Your obedient servant,

Newcastle-on-Tyne, Feb. 17th, 1874. GEORGE Y. HEATH.

To the Editor of THE LANCET.

SIR,—As you have invited information with regard to the occurrence of pyæmia in private practice, I beg to forward you the following abstract of a case which has just terminated. A lady who had recently entered into fresh matrimonial relations had a vascular tumour, small in size, and not painful, at the opening of the vagina, near the urethra. She was seized with symptoms resembling those of rheumatic fever. The ankles and knees became swollen, there was pain and great tenderness about these joints, and she was unable to move her legs. The skin was very hot, the pulse varied in frequency from 100 to 120, and the skin was occasionally bathed in perspiration. She then complained much of pain in the back and left side. The water was loaded with lithates. The arms became affected in the same way as the legs, and she was unable to move any limb. She then had pain on the right side of her face, and was not able to move her jaw properly, but she talked incessantly. The swelling of the legs subsided, and she was able to move them again, but the pupils now became dilated, and there was comparative insensibility to external impressions and wandering of the mind. A number of small vesicles appeared on the chest. The fluid in these at first appeared transparent, but gradually became opaque, like pus. A series of rigors occurred. The pulse now varied from 130 to 140. The skin on the right side of the chest and neck presented an irregular erysipelatous blush. The red portions were not clearly defined, nor raised above

the surrounding skin. The general surface was sometimes very hot and dry, sometimes bathed in profuse perspiration. The intestines were much distended with flatus. The skin over the nates became irregularly inflamed, and the cuticle was broken in many places. The coma increased, the tongue became dry, and a large portion of skin on the lower part of the back became affected. After death this was found to be quite black.

In this case we have the symptoms of rheumatism, erysipelas, deposits on the surface of the skin (first vesicular, then puriform), and mortification of the skin, all proceeding from one and the same poison. Had this patient lived long enough, I do not doubt but that secondary deposits of pus would have been found in internal organs, if they did not already exist. The origin of the poison I believe to have been the irritated and broken granulations of the vascular tumour.

I am, Sir, your obedient servant,

Savile-row, Feb. 21st, 1874. HENRY LEE.

To the Editor of THE LANCET.

SIR,—I have much pleasure in replying to your correspondent's inquiries (p. 285.)

1. The instruments with which I operated were a long double-pronged vulsellum, and a pair of long scissors, the blades of which were well curved and blunt-pointed. These instruments were made for me many years ago by Weiss for the removal of polypi. They had never been out of my own possession, nor had they ever been used in hospital. Further I may add here, that from the earliest period of my professional life it has been my invariable custom after using any instruments to sponge them with Condy's fluid and water, and, when made of steel, carefully to dry and then to rub them with a soft leather upon which some fine emery has been sprinkled. In this way I have always kept my instruments in a "healthy" condition.

2. Miss F—— had no nurse of a professional kind. It was suggested to her that it would be wise for a few days to have the attention of a skilled nurse, but she so strongly objected that I did not press the matter upon her, especially as I had until then without an exception seen these cases do well, and rapidly recover, after a week's rest, the frequent use of the tepid douche, and an occasional aperient. From the date of the operation until this lady's death she was most devotedly attended by her sister and her servants, and in the investigation I subsequently instituted I satisfied myself that no member of Miss F——'s household had been in contact with any sick person whatever, my inquiries being especially directed to the visits of the servants to sick relatives, children, &c.

3. Having regard to the moderate size of the growth, the ease with which I reckoned it could be withdrawn from the vagina, and the painless nature of the proceeding necessary for its removal, I decided not to administer any anæsthetic; therefore I was unaccompanied by any assistant.

In conclusion, I will remark that when preparing the notes of this case to send to you for publication, I fully anticipated that a large number of practitioners would contribute cases; hence I condensed my report into the smallest possible space, and in so doing I omitted the particulars now supplied, as well as others, which, taken as a whole, convinced me that my patient succumbed to an attack of undoubted pyæmia.

I am, Sir, faithfully yours,

Finsbury-square. JAMES PALFREY.

To the Editor of THE LANCET.

SIR,—In a short article published in to-day's number of THE LANCET, on the Discussion on Pyæmia, you have given me the credit of having made the startling assertion that "most of the cases of pyæmia coming into Guy's were admitted with the affection upon them." Now, what I really did say was that "some of the worst cases of pyæmia which we saw in Guy's Hospital were admitted with the affection;" and as the error is an important one, I shall feel much obliged if you will kindly insert this note.

I am, Sir, faithfully yours,

Upper Brook-street, Feb. 21st, 1874. THOMAS BRYANT.

MEDICINAL USE OF CERTAIN SULPHIDES.

To the Editor of THE LANCET.

SIR,—Dr. Ringer has done good service in bringing into prominent notice the use of certain sulphides in diseases attended with suppuration.

About ten years ago I had under my care a child afflicted with unhealthy strumous ulcerations in the neck and other parts of the body. The sores had thickened edges; and, in some, a small greenish slough formed. There was no evidence of syphilitic taint. Cod-liver oil and iodide of iron had no curative action, but on half-grain doses of sulphide of calcium in water a very striking amendment took place.

I have found the sulphuretted potash of the H.P. an admirable remedy in many cases of glandular suppuration. In follicular tonsillitis, also, I have employed this salt with highly satisfactory results. One grain can be made into a pill, with a drop of oil of anise added as an effectual means of overcoming the abominable odour of the salt. When made, the pill may be coated with ethereal solution of tolu; this will not only conceal the smell, but will prevent the contained sulphide absorbing oxygen and becoming an inert sulphate.

M. Tiry, of Paris, prepares capsules containing the sulphuretted potash. In these the salt is perfectly protected from the air, and in this form the drug is readily given to the most fastidious of patients. The capsules that I have seen and used were obtained from Messrs. Corbyn, and imported by that house from Paris.

I am, Sir, obediently yours,

JOHN C. THOROWGOOD, M.D. Lond.,

February, 1874. Lecturer on Materia Medica at Middlesex Hospital.

To the Editor of THE LANCET.

SIR,—Your issue of February 21st contains an article by Dr. Sidney Ringer on the sulphides of potassium, sodium, and calcium, in which he refers to the power of these agents to control suppuration, and states that he has found them to be valuable agents in the treatment of boils, carbuncles, scrofulous glands, and many skin diseases. With his statement I fully concur, having frequently used the sulphides in the treatment of similar cases with great success. But, however interesting and curious these facts may be of themselves, I think more valuable instruction may be derived from them if we seek to ascertain how and why they are such valuable therapeutic agents in the treatment of the special affections alluded to, and, having gained this knowledge, we will then have a scientific basis on which to found our treatment. Therefore, having this object in view, I trust you will allow me to quote the following remarks from my work on the "Specific Action of Drugs," where I premise that the full therapeutic value of any drug is only to be obtained by first ascertaining its physiological action. Now, as regards the sulphides, when swallowed in a full dose they are, to a certain extent, decomposed by the free acid in the stomach, sulphuretted hydrogen is evolved, and some of the effects produced are due to this gas—viz., an acid taste in the mouth, burning pain in the throat and stomach, dry cough (sometimes vomiting and purging), feeble pulse, faintness, convulsions, or a state of sopor. But in smaller doses, frequently repeated, they produce an anæmic condition, with general nervous depression. Applied externally they cause a papular or vesicular eruption, and it is well known that the sulphides, like sulphur, are eliminated by the skin in the form of sulphuretted hydrogen.

Now these facts indicate that the specific action of these agents is upon the skin and mucous membranes in the process of elimination, and also to a certain extent upon the blood-corpuscles (the secondary effects being due to the changes produced in the nature and quality of the vital action of these parts). We naturally infer that the therapeutic action of these agents will be on the same tracts, and hence we are led to use them in such affections as chronic catarrh, follicular sore-throat, chronic bronchitis, abscesses, scrofulous glands, and many skin diseases; also to improve the condition of scrofulous children suffering from indolent abscesses, but in these cases we give a less dose than a physiological one—viz., a *restorative* dose.

We can thus remove the sulphides from the list of empiric remedies, having facts at our disposal to account for their remedial action, for I have indicated that given in a physiological dose they influence certain specific parts; and daily experience (e.g., the cases communicated by Dr. Sidney Ringer) confirms the truth of the inference that in a restorative dose they will beneficially influence the same parts when deranged, and this they do either by in some manner altering the nature and quality of the vital action of the parts or by removing the state of combination of the elements which excited diseased action, and thus enabling the normal powers of nutrition to restore the healthy constitution; and this I consider applies not only to the sulphides but also to every other drug. Now in reference to the dose mentioned by Dr. Sidney Ringer—viz., one-tenth of a grain every two or three hours—I consider the quantity quite sufficient, and this for two reasons. 1st. Because the sulphides are comparatively insoluble and slowly diffusible salts, hence require to be given in small and repeated doses to ensure their being absorbed into the system, for if a large dose be given at once it may pass through the intestinal canal before it can be changed into a condition necessary for absorption; moreover, by giving small and repeated doses we can keep the system longer under the influence of the drug. 2nd. A small dose is indicated because we wish the restorative action of a drug on a part whose functions are deranged, and not its physiological action, at least in the cases mentioned above.

I remain, Sir, your obedient servant,

ALEX. G. BURNESS, M.B., &c.

Green-street, Grosvenor-square, Feb. 23rd, 1874.

THE CAUSE OF LATE ERRORS OF SANITARY ADMINISTRATION.

To the Editor of THE LANCET.

SIR,—While heartily approving your repeated forcible exposures of the *fiasco* resulting from the Public Health Act, 1872, and its administration, I must beg leave to protest against the blame being thrown wholly upon Mr. Stansfeld. It cannot surely be forgotten that the main lines of organisation of authorities and officers were laid down by the Royal Sanitary Commission, and have been all along defended pertinaciously by Sir C. B. Adderley and Mr. F. S. Powell, who, as leaders of the Commission, insisted on the independent sanitary authorisation of every small local board and town council, and every extra-urban bit of a parochial union, in the kingdom. It was these gentlemen who first proposed that each of these trumpery "authorities" should be fully empowered, and, indeed, compelled, to appoint its own health officer. Herein lies the obvious cause of the blunders which have been perpetrated.

Mr. Stansfeld, indeed, was unwise enough to adopt the main outline of their measure, although he somewhat improved it by striking out "Special Drainage Districts" from the medley of urban authorities proposed by the Sanitary Commission.

Now, Parliament having empowered and ordered each of these districts to appoint its own officers, medical or other, without any conditions as to qualification, without any means of mutual co-operation, without any power in the central authority to combine districts and their authorities, on reasonable principles, for certain purposes, what could Mr. Stansfeld's inspectors have done, had they proved the ablest administrators in the world, but say to the various local authorities within any larger area that they might fancy (no principle of action being settled by Parliament), "We advise you all to combine to make such and such arrangements"? *They did this*, as we know, in numerous instances, but in no one instance that I am aware of did *all* the local authorities, within the area recommended, consent to surrender their legal right of separate appointment. One or more (sometimes many) local insulæ of administration stood out of each scheme, whether it were bad or good. The result was inevitable. It matters not whether Adderley or Stansfeld be in office under the present law, the legalised autonomy of nearly 2000 districts cannot be resisted by *any* central authority.

We must be just, even to our most unreasonable opponents in this matter. The error, as the joint committee of the two associations at once pointed out, was the authorisation of badly constituted authorities, and the establishment of impracticable areas of sanitary administration. To this miserable system, the origin of the present muddle, Sir C. B. Adderley is pledged, Mr. Powell is pledged. They are therefore hopeless. However desirable may be many sanitary provisions which these gentlemen propose to add to the Public Health Act (and the objects of some are very important), these provisions will have to be administered by the present incompetent and ill-constituted authorities, in the present unworkable areas. Sir Michael Hicks-Beach, Dr. Lyon Playfair, and a few others understand this question, and they would have amended the Act accordingly, had not the leaders of both parties combined to prevent amendment and to force a wretched abortion of sanitary legislation through Parliament.

Real sanitary reformers ought now to be awake. No time should be lost in clearing the public view of this vexed and still misunderstood question. The demand should be—first, for the appointment of a well-informed Boundary Commission, to prepare a scheme for the adjustment of the conflicting areas of counties, boroughs, and unions, so that Parliament may be able to enforce something like conformity of arrangement and action, some rectification of conflicting jurisdictions; secondly, to bring in an amendment of the Public Health Act, empowering the central authority to correct areas and boundaries, and to combine and improve authorities; and, thirdly, to construct a proper machinery for the registration of sickness in connexion with the Registration Department, all the agents being fairly remunerated, and adequate supervision, both local and central, being secured. Then, and then only, will a proper health officer system be possible.

To throw the whole blame of the marvellous blunders that have been made in all parts of the country solely upon the central administration of an Act, which is in itself the plain source of the evils, is neither fair nor philosophical.

I am, Sir, &c.,

Cheltenham, Feb. 16th, 1874. HENRY W. RUMSEY, M.D.

THE TREATMENT OF TINEA TONSURANS.

To the Editor of THE LANCET.

SIR,—The treatment of true parasitic ringworm of the hairy scalp is commonly so tedious that we all would gladly welcome and put to the proof any method which promised us more quick success. Hence my present letter, with which I trouble you in order that a method which on several occasions has seemed to me to be very satisfactory may be tried by others who are free from the bias of him who makes an experiment for the first time.

An eminent chemist, now dead, told me some years ago that he had been engaged by a business firm to discover the reason why their patent manures, so far from causing the crops to thrive, destroyed them. My friend believed that in a minute quantity of sulphocyanide of potassium present in the manure he had discovered a powerful poison to vegetables. The thought came into my mind that it might be worth while to try whether the same salt would kill those parasitic fungi which give us so much trouble. But it is only during the last month or two that I have put the hypothesis to the test of experiment; and the result, as I said, has been satisfactory enough to make me wish to put it to the further test of publication. My method is as follows:—

1. Cut the hair everywhere quite close, and keep it cropped as fast as it grows.

2. Wash the scalp with warm water and soap twice a day, and on no account let the hair get matted down on to the skin.

3. After washing and drying the head rub the following lotion well into any patches of ringworm:—Sulphocyanide of potassium, ½ oz.; glycerine, 1 oz.; water, 7 oz.

4. Keep a piece of lint, soaked in the same lotion, on the scalp night and day, oil-silk upon the lint, and a calico cap over all.

I found that if the solution of sulphocyanide be stronger than I have mentioned it will be very likely to set up eczema. The salt is said not to be in the least degree poisonous to man.—I am, Sir, yours truly,

Harley-street, Feb. 24th, 1874. SAMUEL GEE.

ASPIRATORS.

To the Editor of THE LANCET.

SIR,—With reference to the correspondence respecting our aspirator, described in THE LANCET of the 14th inst., we beg leave to state that we were not previously aware that Messrs. Weiss had adapted a glass tube to the brass cylinder; but although the adaptation may not be new, we claim to have produced by this method a perfect vacuum, in which Messrs. Weiss apparently did not succeed, as they have abandoned the pattern in question.

Neither in our circular nor in the notice you kindly gave us was any claim of originality made to the three-way stop-cock, or the piece of glass tubing.

We are, Sir, your obedient servants,

JAMES COXETER AND SONS.

Grafton-street East, W.C., Feb. 24th, 1874.

BIRMINGHAM.

(From our own Correspondent.)

OUR coroner, Dr. Birt Davies, has recently put his veto on inquests being held at hospitals, workhouses, or asylums, although he was desired to do so by the Town Council (with a view to the saving of expense), on the ground that "the place" for holding inquests has for centuries been left to the discretion of the coroner, "and that to contravene and overturn the rule that has so long worked well, and to subordinate a national officer like the coroner to the fluctuations of a municipal majority, would be a grave error." He holds that until central judicial buildings and proper mortuaries in the various wards are erected, no change in the present system should be made, and he has good reasons for objecting to the proposal of the municipal authorities.

The medical committee of the Queen's Hospital, having carefully considered "the report of the Committee of Reference for an Examining Board in England," have instructed their chairman, Dr. Heslop, to represent to the Committee of Reference "that the Note M appended to Regulation 23, section 2, is calculated to render nugatory the said Regulation 23; and they respectfully, but urgently, submit that every student should be required to discharge the duties of clinical clerk for six months, and dresser for six months, in a recognised hospital." The Note M is to the effect that dressers and clerks may perform these duties "at a hospital, general dispensary, or parochial infirmary recognised for this purpose." So far it is reasonable and satisfactory; but it proceeds to say, "or in such other similar manner as shall afford sufficient opportunity for the acquirement of practical knowledge," thereby affording an opportunity for anyone to obtain certificates as a clerk or dresser without having efficiently performed the duties of either office under the proper instruction and superintendence of the officers of any recognised medical institution whatever.

Mr. Henley, the inspector of the Local Government Board, has spoken plainly as to the insufficiency, which THE LANCET has before pointed out, of the medical staff of the workhouse. He tells the guardians that one medical man cannot properly look after the health of 2000 paupers, and he also recommends that the number of nurses should be more adequate to the requirements of the infirmary.

At the last meeting of the Midland Medical Society, held February 4th, Dr. Sawyer exhibited a number of biliary calculi, showing some of the principal varieties of these concretions. He made some remarks upon their composition and formation, and put forward suggestions as to their evacuation and treatment. Mr. Lawson Tait showed the new German Hæmatoxylin solution for staining microscopic sections, and a new combination of it with nitric acid he had just discovered, which promises to excel carmine in its action, and equals it in purity of colour. Mr. Thomas showed the premaxillary bones of an infant six months old, removed in an operation for hare-lip by Mr. Furneaux Jordan, and made remarks on the best method of treating projecting intermaxillary bones. Mr. Furneaux Jordan made a number of observations on various surgical topics—treatment of the pedicle in ovariotomy by enucleation, of which he had just had an excellent example in his practice; shock and effects of cold air; incurvation of the penis treated by excision of a wedge-shaped piece from the corpora cavernosa; and the occasional ill-effects of drainage-tubes, especially in mammary abscesses, were the principal points on which he spoke.

Esmarch's bloodless apparatus has been used in many cases at the General Hospital, with excellent results. Mr. Pemberton employed it for amputation of the arm, after an old excision of the elbow; the stump rapidly healed. Mr. Baker had an equally good result in a case of amputation of the thigh; and Mr. Bartleet and Mr. Jolly have also removed sequestra from the tibia with the escape of scarcely a drop of blood. Mr. Furneaux Jordan, in removing a thigh at the middle third for medullary cancer springing from the fibula, and which caused the leg to measure 31 inches in circumference, prevented loss of blood by previously fastening a strong piece of india-rubber tubing firmly round the upper part of the thigh. The patient had hardly any hæmorrhage, and is now gaining flesh and doing well at the Queen's Hospital.

Birmingham, Feb. 16th, 1874.

IRELAND.

(From our own Correspondent.)

FOR the last month our attention has been engrossed by politics. In addition to the old schism of Conservatives and Liberals, we have the new sect, the Home Rulers, and we have been greatly exercised. Owing to the suddenness of Mr. Gladstone's *coup*, there was no time afforded for the concentration of Home Rule, so that it is likely to be exhibited to the new Parliament in a very dilute form. Nevertheless, of the four medical men returned to Parliament by Irish constituencies, Dr. Brady, Sir John Gray, Mr. Mitchell Henry, and Dr. O'Leary, the three latter are Home Rulers of the most decided character. There was very little, if any, rioting during the election, thanks to the ballot, and the cause of surgery may, in consequence, be said to have sustained a loss. At the election, however, of a medical officer for the Pallaskenry Dispensary District last week, it was rumoured that the mob would gather and intimidate the Dispensary Committee if the popular candidate, the Home Rule doctor, was not elected, and a large force of police was drafted into the village to prevent the occurrence of any disturbance. The popular candidate fortunately was elected, so that their services were not required. We may yet perhaps have a Home Rule Chair attached to our schools of medicine; if so, the Rev. Prof. Galbraith will certainly have a high claim upon that appointment. We hope that, now Mr. Disraeli is Premier, something will be done towards the passing of a Public Health Act for Ireland. It is well known that Mr. Gladstone's Government had a Bill ready for introduction last session on that subject, and a minister whose shibboleth some eighteen months ago was "*sanitas sanitatum omnia sanitas*," can hardly withhold from this country the benefits of sanitary legislation any longer. There is, besides, a surplus of some five millions of the church money somewhere or another, if Mr. Lowe has not manipulated it, with which Mr. Gladstone some years ago threatened to endow Irish midwives and lunatics. A portion of this sum would enable a good sanitary organisation to be carried out in Ireland, and so perfect the Irish Poor-law medical system. That service is at present engaged in elaborating a scheme which will shortly be laid before members of Parliament in anticipation of the introduction of legislation on this subject.

Out of Dublin there may be said to be no hospitals in Ireland except those connected with the workhouses and the county infirmaries. To the latter most surgical cases are sent, as there is no regular staff of nurses in connexion with the workhouse hospitals, and many persons have an objection to be treated for either a medical or surgical disease in a workhouse. There were 36 infirmaries in Ireland in 1851; they had decreased to 33 in 1871, when they possessed accommodation for 2137 persons, and 184,885 patients had been admitted into them during the preceding ten years. These infirmaries are principally supported by

grants made by the grand jury of the county in which they are situated. Now, however, several grand juries have elected not to support these institutions any longer, and both the Drogheda and the Limerick grand juries have refused to ratify the usual grants for that purpose. These institutions, if they do not now cease to exist altogether, will come under the immediate control of the Local Government Board, and as there are no endowments connected with Irish hospitals sufficient to make them self-supporting, it is the first step towards bringing all hospitals in Ireland under the control of the Local Government Board. If the patronage was limited to "the Board" itself, the worst might be that our hospitals might be officered by political doctors; the next five years' vacancies filled up by Conservatives, the next by Liberals, then Home Rulers, and after that "the deluge"; the benefit of the patients and the cause of surgery and medicine being of secondary consideration. But when we contemplate the appointment of the physicians and surgeons to our hospitals being placed in the hands of Boards of Guardians, or, as they designate themselves, "the Boord," we cannot congratulate ourselves on the future prospects of medicine and surgery in this country.

As Mr. Gladstone took the opportunity of his going out of office to fill up a vacancy in the law courts which has existed for some time, so the appointment of visiting physician to the District Lunatic Asylum, Dundrum, has been filled by the election of Dr. John Hughes to that office.

The Emperor of Germany has conferred the insignia of the Prussian order, "Pour le Mérite," upon the Rev. Dr. Lloyd, Provost of Trinity College, Dublin, whose works in optics and the polarisation of light have become text-books in the German universities.

The medical students of Trinity College are forming a new medical society. If it is carried out as the Historical Society and other associations connected with the university, it cannot fail to be a success.

By the by, from time to time the appointment of sanitary officers, with their salaries &c., appears in THE LANCET. How many officers of health have been appointed under the Act of 1872, and what is the aggregate of their salaries? What is the total number of urban and rural districts in England, and how many have been filled up? We are anxious to know this here; even an approximation would afford useful data in case of sanitary legislation for Ireland this session.

Dublin, February 24th, 1874.

New Invention.

MR. MALLAM'S INSTANTANEOUS VACCINATOR.

PATENTED.

THIS little instrument is to some extent an adaptation of the cupping scarificator for vaccination purposes. Instead, however, of being armed with lancets like the scarificator, it has three steel teeth, gilded to prevent rusting, placed at equal distances from each other, and which, being set by the trigger, are released by pressure on a knob, producing three abrasions of the skin instantaneously. The lymph is then blown from the tube and rubbed over the abraded surfaces, and the operation is completed. The perforated surface of the little instrument is concave, so as to fit the arm of an infant.

The celerity with which the operation can be performed will of itself recommend this instrument to all gentlemen in high-class practice, as it will tend to relieve the very sensitive feelings which some mothers and nurses display whilst the operation of vaccination is being performed.

The manufacturers and patentees are Arnold and Sons, 35 and 36, West Smithfield, London.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted as Licentiates on the 19th of February:—

Bevan, John Paul, Shardeloes-road.
Field, Ernest, Guy's Hospital.
Lane, Benjamin, 4th Regiment, Woolwich.
McKnight, Wellington, Shropshire.
Savage, James, Bridlington-quay, Hull.
Taylor, Christopher Musgrave, Wrawby, Brigg.
Wright, Frederick Henry, Lorrimore-square.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Feb. 19th:—

Ashworth, Jas. Henry, Bourne, Lincolnshire.
Bateman, Lewis Philip, Dudley, Worcestershire.
Steele, Henry Francis Arthur, Liverpool.

The following gentlemen passed their Primary Professional Examination on the same day:—

Bickford, William, St. Thomas's Hospital.
Horne, John Fletcher, Leeds Hospital.

UNIVERSITY OF DUBLIN.—The following degrees were conferred on the 17th inst. by Sir J. Napier, Vice-Chancellor of the University:—

BACHELOR IN MEDICINE.—Edward Allingham, Thomas Booth, John Dudley, Morgan Hamerton, George Lewis, Hercules M'Donnell, Charles Murray, William Welch.
DOCTOR IN MEDICINE.—John Hawtrey Benson, Richard Theodore Stack, William Welch.
MASTER IN SURGERY.—Alexander Bredon, Hercules M'Donnell.
LICENTIATE IN MEDICINE.—Edward Lawder, Robert Ruttle.

MR. HUGH R. KER has just received a grant of £31 15s. for eighteen months' public vaccination for No. 2 District of Rowley Regis parish, Dudley Union.

PRESENTATION.—At a meeting held at the Town Hall of Great Dunmow, on the 13th inst., Dr. H. S. Howell, F.R.C.S., was presented by his patients and friends, on his relinquishing practice in that neighbourhood for London, with a handsome testimonial, consisting of a silver salver with a suitable inscription, a handsome mantel-piece clock, and other articles.

THE number of deaths registered in London last week was 1616, equivalent to an annual death-rate of 25 per 1000. Seven of the chief zymotic diseases caused 168 deaths, or 95 less than the corrected average for the corresponding week in ten previous years. Measles and whooping-cough were the most fatal of these diseases. Phthisis and the diseases of the respiratory organs caused 595 deaths.

BEQUESTS &C. TO MEDICAL CHARITIES.—St. Mary's Hospital Paddington, has received a fifth £1000 from "D. T. H." The Royal Infirmary for Children and Women, Waterloo Bridge-road, has received a fifth £1000 from "E. F. S." St. Mark's Hospital for Fistula &c., City-road, has received a fifth £1000 from "E. N." The City of London Truss Society has received £1000 from "C. L. T." The Royal Hospital for Diseases of the Chest has received a sixth £1000 from "W. P. D." William Smith, Esq., of Bowden, has given £200, and John Finnie, Esq., of Bowdon Lodge, Dunham Massey, £100, to the Altrincham Hospital.

THE rate of mortality in Paris during the year 1872 was 21·9 per cent.; the city was therefore, with the exception of London, the healthiest of the European capitals. No less than 797 cases of suicide were officially recorded, and even this large number is not supposed fully to represent the amount of self-destruction which marked the year. Rome appears to have been the most unhealthy capital during the year 1872, the mortality amounting to 37·7 per 1000; Florence comes next, with 34·8; then Berlin, with 32·3 per 1000.

A ROYAL PRESENT.—His Majesty the King of Siam has presented a superb gold salver to Dr. W. Campbell, the surgeon to Her Majesty's Consulate-General, in acknowledgment of his professional services. The salver bears, in Siamese and English, the following inscription:—"Presented by His Majesty Somdet Prabat Para Maudr Chulalonkorn, King of Siam, to William Campbell, M.D., Fellow of the Royal College of Surgeons of Edinburgh, as a token of His Majesty's esteem and gratitude for medical services rendered. 1873."—*The Times.*

Medical Appointments.

ALLEN, W. H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for Rousay and Egilshay, Orkney, vice Jefferies.

BUNNY, Mr. J. B., has been appointed House-Surgeon, Clerk, and Apothecary to the Dumfries and Galloway Royal Infirmary, vice Wicks, resigned.

EVANS, H. E., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Registrar of Births &c. for the Kilkeel No. 1 Dispensary District of the Kilkeel Union, vice Preston, appointed to the Kilkeel No. 2 Dispensary District.

EWART, J. H., M.R.C.S.E., L.R.C.P.L., has been appointed Honorary Surgeon to St. Mary's Hospital for Women and Children, Manchester, vice Pettinger, promoted.

FIELD, G. P., M.R.C.S.E., has been appointed Aural Surgeon to St. Mary's Hospital, Paddington, vice Allen, deceased.

GALABIN, A. L., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to the Hospital for Sick Children, Great Ormond-street, vice Phillips, deceased.

HARVEY, Mr. S., has been appointed Public Analyst for the City of Canterbury.

HIGHTON, T., M.R.C.S.E., has been appointed House-Surgeon to the Derbyshire General Infirmary, Derby, vice Sharpe, resigned.

HUGHES, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Visiting Physician to the Dundrum Criminal Lunatic Asylum, vice Law, resigned.

HUGHES, R., M.R.C.S.E., has been appointed Resident Medical Officer to the Hospital for Sick Children, Pendlebury, Manchester, vice Hogg, resigned.

JACKSON, J. H., M.D., F.R.C.P.L., has been appointed Physician to the London Hospital, vice Davies, resigned, and appointed Consulting Physician.

KERNE, J., F.R.C.S.E., has been appointed an Assistant-Surgeon to the Westminster Hospital, vice Davy, promoted to Surgeon.

KENNEDY, T. A., L.K.Q.C.P.I., L.R.C.S.I., has been reappointed Resident Surgeon and Apothecary to the Western General Dispensary, Marylebone-road.

LEADAM, W. W., M.D., has been appointed Physician to the London Diocesan Deaconess Institution, vice Webb, deceased.

MYNORS, Mr. W. T., has been appointed Assistant to the House-Surgeon, General Infirmary, Stafford, vice Hemsted, resigned.

OLLERENSHAW, T. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Minehead District of the Williton Union, Somersetshire, vice Gaye, resigned.

PARK, Dr., has been appointed Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

POTTS, Mr. E., has been appointed Assistant-Surgeon to the Leith Hospital.

PRESTON, E. F., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Registrar of Births &c. for the Kilkeel No. 2 Dispensary District of the Kilkeel Union, vice Harbinson, resigned.

PROCTER, W., M.D., has been appointed Public Analyst for Beverley: £10 per annum and fees.

RAYNE, C. A., M.B., B.S., M.R.C.S.E., has been elected House-Physician to the Radcliffe Infirmary, Oxford.

ROPER, Dr. G., has been appointed a Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

RYLEY, J. B., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Workhouse and District No. 1 of the North Witchford Union, Cambridgeshire, vice Newham, resigned.

SATCHELL, W. A., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Kew District of the Richmond Union, Surrey, vice Trentler, resigned.

SERGEANT, E., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health and Public Analyst for the Borough of Bolton.

STICKLAND, S., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Portsea Island Medical Provident Institution, Landport, Portsmouth.

STUBBS, H., F.R.C.S.E., has been appointed a Consulting Surgeon to the Royal Infirmary, Liverpool, on resigning as Surgeon.

TAYLOR, A. C., M.B., M.R.C.S.E., has been appointed Medical Officer for the South District of the Bingham Union, vice Marriott, deceased.

WHERRY, G. E., M.R.C.S.E., has been appointed House-Surgeon to Addenbrooke's Hospital, Cambridge, vice Edginton, appointed Resident Surgeon to the Birmingham General Hospital.

WILKINSON, T. M., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for District No. 3 of the Lincoln Union, vice Higgs, deceased.

WILLIAMS, Dr. J., has been appointed a Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road.

[In the following list—under the Public Heath Act, 1782—the letters "P.S.D." signify Port Sanitary District, "R.S.D." Rural Sanitary District, and "U.S.D." Urban Sanitary District.]

Districts, and Medical Officers.			*Salary per ann.*	*Area in Acres.*	*Population.*
Altrincham, Congleton, Nantwich, Northwich, R.S.D.s					
Middlewich, Nantwich, Northwich, Sandbach, Witton-cum-Twambrookes, U.S.D.s		Dr. T. R. Fraser	£800	266429	129009
Basford, U.S.D.—	Mr. Wm. Maltby...		£50	2504	13038
Baslow, U.S.D.—	Dr. Philip S. Fentem...		£4	5465	813
Bolton, U.S.D.—	Mr. Edward Sergeant...		£350	2000	90000
Builth, R.S.D.—viz.:					
Builth Sub-district—	Mr. John Jones	To be fixed after Lady-day	68410		4250
Abergwesin „	Mr. Hugh Bennett ...		70900		4014
Cardigan, R.S.D.—viz.:					
No. 1 Sub-district—	Mr. W. M. Neott		£70	24745	3980
„ 2 „	Dr. James M. Phillips ...		£20	19182	4422
„ 3 „	Mr. David Havard		£25	30893	5648
Dolgelly, R.S.D.—viz.:					
Dolgelly Sub-district—	Dr. Edward Jones ...			30608	5322
Barmouth „	Mr. Hugh J. Lloyd ...	Not fixed		24459	2997
Llanegryn „	Mr. John F. Jones ...			23632	2543
Mallwyd „	Mr. Richard Griffiths			19623	1817
Tally-llyn „	Mr. John Thos. Jones			14048	1578
Droitwich, R.S.D. (part of)—	Mr. John Rogers...	Not fixed		—	—
Erpingham, R.S.D.—viz.:					
Briston Sub-district—	Mr. John Hales		£18	13361	3013
Reckham „	Mr. Geo. Skrimshire ...		£10	6210	1160
Cley-next-the-Sea Sub-dist.—	Mr. W. Sumpter		£10	8724	1566
Northrepps „	Mr. A. E. Fluder		£62	30381	13196
Holywell, R.S.D.—viz.:					
Mold Sub-district—	Dr. Wm. Williams		£35	31315	13262
Holywell „	Mr. James Williams ...		£35	28919	14041
Horncastle, R.S.D.—	Dr. Hugh George...		£260	113448	18892
Liskeard, R.S.D.—viz.:					
Liskeard Sub-district—	Mr. John Jago... ...		£35	46662	15534
Looe „	Mr. Wm. Row		£25	30529	9127
Callington „	Mr. John Kempthorne		£25	22651	9631
Litchurch, U.S.D.—	Mr. John Lindley		£25	633	11087
Narberth, R.S.D.—viz.:					
Narberth Sub-district—	Mr. Thos. G. Bush ...		£10	29482	6844
Begelly „	Mr. Geo. Richards ...		£10	29939	5537
Llanboidy „	Mr. C. L. Crosswell ...		£10	28863	4185
Slebech „	Mr. Hugh P. J. Price		£10	34047	4744
Newport, I.W., U.S.D.—	Dr. E. Allan Waterworth		£50	—	6744
Normanton, U.S.D.—	Mr. Wm. S. Mackenzie ...		£15	1174	6400
Pwllheli, R.S.D.—viz.:					
Aberdaron Sub-district—	Mr. Robt. H. Owen			17338	3567
Criccieth „	Dr. John Roberts ...			11270	2586
Nevin „	Mr. John E. Hughes	Fees		16944	4661
Aberdaron „	Mr. Thos. H. Hughes			16816	2733
Pwllheli	Mr. Hugh H. Hughes			19404	4130
Pwllheli, U.S.D.—	Mr. Hugh H. Hughes	Fees		1072	3106
St. Helens, I.W., U.S.D.—	Mr. Philip C. Hayman	£31 10s.		1830	3200
South Stockton, U.S.D.—	Mr. Joseph Laidler ...	£20		335	8000
Thetford, U.S.D.—	Mr. F. W. Joy	£20		6460	4166
Thorne, R.S.D.—viz.:					
Thorne Sub-district—	Mr. George Gooddy ...	£20		11900	3371
Crowle „	Mr. H. W. T. Ellis ...	£15		4656	1432
Epworth „	Dr. Alex. Cameron ...	£10		11388	2686
Belton „	Mr. Henry W. Pullan...	£10		8630	1941
Hatfield „	Dr. Alex. Cameron ...	£20		27320	3708
Walsall, R.S.D.—viz.:					
Aldridge Sub-district—	Dr. W. H. Cooke ...			4700	4394
Bloxwich „	Mr. J. H. Somerville	Not fixed		1250	2389
Darlaston „	Mr. Samuel Partridge			1180	323
Stafford-street „	Mr. F. W. Willmore			1000	1703
Wells, Somersetshire, U.S.D.—	Dr. Thos. Purnell	£20		612	4517

Births, Marriages, and Deaths.

BIRTHS.

BARTIAN.—On the 23rd inst., at Avenue-road, Regent's-park, the wife of H. Charlton Bastian, M.D., of a son.

BOWES.—On the 14th inst., at Herne-bay, the wife of J. Bowes, L.R.C.P.I., of a son.

BUCK.—On the 20th inst., at Worcester, the wife of J. Randle Buck, L.R.C.P.Ed., M.R.C.S.E., prematurely, of a daughter.

INGLIS.—On the 20th inst., at Worcester, the wife of A. M. Inglis, M.D., of a son.

MACLEOD.—On the 15th inst., at Galston, Ayrshire, the wife of J. B. Macleod, M.D., of a son.

WINSLOW.—On the 13th inst., at Brandenburgh House, Hammersmith, the wife of Henry F. Winslow, M.D., of a daughter.

MARRIAGES.

O'CONNOR—LEAHY.—On the 29th ult., at Cork, Bernard O'Connor, M.D., of Welshpool, to Jeanne, daughter of the late Daniel Leahy, Esq.

WALSH—CLARKE.—On the 3rd inst., at Whitechurch, near Dublin, Albert Jasper Walsh, Extra L.R.C.P.L., F.R.C.S.I., to Charlotte Maria, daughter of the late Courtney Kenny Clarke, Esq.

DEATHS.

GALLOWAY.—On the 13th inst., James Galloway, M.D., of Wigton, aged 42.

KIDD.—On the 18th inst., Chas. Kidd, M.D., of Westbourne-park-terrace.

KILGOUR.—On the 19th inst., Alex. Kilgour, M.D., of Loirston House, Kincardineshire.

LAMB.—On the 11th inst., Samuel Lamb, M.R.C.S.E., of Stourport, aged 61.

MANBY.—On the 18th inst., at East Rudham, Norfolk, Catherine, the wife of Fred. Manby, M.R.C.S.E.

MAXWELL.—On the 14th inst., J. N. Maxwell, M.D., F.R.C.S.I., of Via Majenta, Florence, aged 67.

RICHMOND.—On the 16th inst., at Fort Buxa, Bhootan, A. F. Richmond, M.D., Surgeon-Major 38th Regiment, aged 38.

BOOKS ETC. RECEIVED.

Drs. Bucknill and Tuke: Psychological Medicine. Third Edition.
Mr. Burn: Building Construction.
Dr. Stokes: Continued Fever.
Mr. Harbison: Elements of Zoology.
Galvano-Therapeutics.
A Digest of the Law relating to Public Health.
Charts of Disease in Manchester and Salford for the ten years 1861-70.
Mr. Rodwell: Birth of Chemistry.
Leisure Hour. Sunday at Home. The Dublin Journal.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, FEB. 26TH, 1874.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 9 A.M.
Feb. 20	30·17	N.W.	...	31	...	44	29	...	Foggy
„ 21	30·11	S.W.	37	39	...	50	30	...	Fine
„ 23	29·85	W.	42	43	...	46	42	0·02	Raining
„ 24	30·06	N.E.	42	43	...	45	42	0·07	Overcast
„ 25	29·90	S.W.	35	36	...	45	33	...	Fine
„ 26	29·35	S.E.	43	45	...	...	35	0·03	Raining

Notes, Short Comments, and Answers to Correspondents.

HEALTH OF MARYLEBONE.

DR. WHITMORE'S Report on the Health of the Parish of Marylebone during the month of January last shows that the mortality was at the annual rate of 25·86 per 1000, or 3·44 per 1000 less than the rate for December, but 5·47 per 1000 in excess of the rate for January, 1873. Bronchitis was exceedingly fatal, causing 32 deaths; measles and whooping-cough were very prevalent, no less than 101 new cases of measles having occurred in ten charitable institutions within the parish. Four deaths were registered from enteric fever, among them being that of a highly respected member of our profession, whose loss was recorded in our columns. Dr. Whitmore, referring to this case, observes that a careful inspection of the deceased's residence showed that its sanitary arrangements were generally very good in all save this, that the waste-pipe from the water-cistern passed directly into the drains. "How far," he adds, "this condition of things may have contributed towards the destroying of a valuable and useful life it is difficult to say; but the bare possibility of its having done so is surely sufficient to operate as a warning to all householders." By the Water Act of 1872, all cistern waste-pipes are required to be entirely disconnected from the drains; but this provision is obviously as yet inoperative.

Emigrant.—The Manual of Domestic Medicine, by Buchan; or the Ship Captain's Medical Guide, by Harry Leach.

M.D.—We really cannot undertake to institute inquiries about our advertisements.

THE AFFAIR AT DUNQUAH.

To the Editor of THE LANCET.

SIR,—Letters having been addressed to the *Standard* and the military papers by Mr. H. B. Festing, reflecting upon the correctness of a recent article in your journal, which I have not seen, being at the time *en route* to England, but which connects my name with the rescue of the body of the late Lieutenant Wilmot at Dunquah, permit me, in order to avoid any further misconception, to give an exact account of my action in the matter.

When Colonel Festing received poor Wilmot's note, asking for reinforcements, he was standing with me about the centre of the column. He at once wrote upon the leaf of his note-book a few pencil lines, directing Jones, of the 2nd West India Regiment, to move on to his assistance, requesting me to carry the order to Jones. This I did, giving the latter at the same time a verbal message to a similar effect. Shortly afterwards Colonel Festing passed on to the head of the column, returning very soon to the spot where I was standing to inform me that he was afraid poor Wilmot had been killed. I at once went to the head of the column, and found the body lying in the pathway, surrounded by a small group of the 2nd West India Regiment, commanded by Sergeant Fairclough, who were at the time replying to the fire of the Ashantees. After a short examination, finding that a ball had penetrated the heart, and that life was quite extinct, I raised the head and shoulders in my arms, and, assisted by some men of the regiment who were near, conveyed the body to the rear of the column, a distance of some three or four hundred yards, where I handed it over to Assistant Commissary Lundy, with a request that it might be at once sent back to Dunquah in a hammock. I then returned to where Dr. Fox was standing. During the whole of this time we were hotly engaged with the enemy upon both flanks, and were obliged in carrying the body along the narrow pathway, crowded with combatants, to step over the muskets of the latter, pointing in all directions; the men, until subsequently relieved by a Fantee policeman, holding their rifles in one hand, while sustaining with me Wilmot's remains with the other.

Poor Wilmot was standing with Sergeant Fairclough about eight or ten paces in front of the column, and was in the act of raising his carbine when he was shot. As soon as the firing had somewhat subsided, Colonel Festing, who had already come up, went forward to the body, and, assisted by Jones, then in command of the advance guard, moved it back to the head of the column, from which we brought it to the rear.

I remain, Sir, your very obedient servant,

February 19th, 1874. ALBERT A. GORE, Surgeon-Major.

Enquirer.—We presume that, being registered in virtue of a medical and surgical qualification, he is eligible for the appointment in question, provided that he has also obtained a certificate of instruction in vaccination from some public vaccinator authorised by the Privy Council to grant such certificates.

THE communication of *Mr. Hardie* (Manchester) is acknowledged with thanks. Our correspondent shall receive a private note.

HOW TO AVOID MAKING OUT BILLS.

AT this season of the year the scientific mood of the practitioner is slightly spoiled by the low and commercial duty of having to make out bills. Anything more uncongenial than this work cannot be imagined. To descend without harm from the consideration of a patient's temperature and of the sphygmographic tracings of his pulse to a consideration of the depth of his pocket requires a superior mind. How grateful, then, should we be to anybody who suggests to us a system by which thought and care over this base department of duty may be avoided. Such a system is before us in the form of a "scale of medical charges" framed with the express object of avoiding a bill. The essence of the system consists in getting a client, or as we had better say a patient, to indicate the scale upon which he is to be charged. It would surprise our clients not a little, before being interrogated as to their sensations and the state of their secretions, to be asked about their rent and the sum upon which they are rated by Commissioners of Income Tax. They would be apt to tell us to mind our own business. Those, however, who think such a system practicable will see the details of it in a "scale of medical charges" prepared by Dr. Leslie.

Mr. Thomas P. Morgan.—The fee of thirty guineas will give a double qualification, whereas the present fee of £22 only secures the diploma of the College of Surgeons. Probably the fact that they will lose five guineas by being "plucked" will make students more careful about presenting themselves insufficiently prepared for the examination.

Dr. Kitchener.—We have official, and therefore undoubted, information.

CASE OF POISONING WITH CHLORODYNE.

To the Editor of THE LANCET.

SIR,—I notice in your issue of Feb. 21st a case of poisoning with six drachms of hydrate of chloral cured by injection of strychnine. Having had a remarkable case of poisoning by Brown's chlorodyne cured by injection of ammonia in Melbourne in 1872, I send you an account of it, thinking it may be interesting to your numerous readers.

On March 26th, at 11.30 P.M., a gentleman called, desiring me to visit his wife at once, saying that she had taken an ounce of Brown's chlorodyne at 7 P.M. by mistake, four hours previous, and that she was lying quite insensible; that she went to her room about 7 o'clock, and he found her a short time afterwards lying on the bed undressed, and thought she was sleeping. Did not go again till after 11, and then found her in a state of stupor, and could not rouse her. He had purchased an ounce of Brown's chlorodyne for her that day, as she was in the habit of taking small doses of it to relieve pain, and, noticing the empty bottle on the dressing-table, he came for me at once. The house being a short distance from my residence, I arrived there about 11.30, and found Mrs. —— lying on the bed in a state of complete insensibility. Nothing would rouse her. She was perfectly motionless; the pulse weak, small, and irregular; breathing slow and stertorous; cold; pupils contracted and insensible to light; and no power of deglutition. I switched her, pricked her feet, and used various means to rally her, but not a muscle moved. The case appeared quite hopeless. In my opinion there was no hope of recovery, and I expected death every minute. After waiting about ten minutes, and death not taking place, I determined to try the injection of ammonia, and opened a vein in the left arm and injected half a drachm of strong liquor ammoniæ (B.P.) with a drachm and a half of water. In twenty minutes there was a decided improvement of the symptoms, the pulse stronger and more regular, the breathing easier, followed by a general reaction, the body regaining warmth. The improvement was so great that I was now able to use the stomach-pump, and, having washed the stomach out with warm water, introduced about a pint of strong coffee and brandy. The patient continued to improve up to 3 A.M. of the 27th; pulse regular, about 90, full and strong; breathing regular, with an occasional deep inspiration, but no return to consciousness; pupils still remaining contracted and insensible to light, and nothing rousing her from the stupor. Having been now seven hours in this state of coma, in consultation with another practitioner, we decided to give succus belladonnæ as an antidote to counteract the effects of the morphia in the chlorodyne. Thirty drops were put on the tongue, and in ten minutes fifteen drops more. In a short space of time the pupils began to dilate, and a slight twitching of the muscles of the face was followed by a return of consciousness, and in a short time she was able to answer questions. The stupor and insensibility returned again and again up to 7 A.M., when she became quite conscious, only suffering from thirst and vomiting during the greater part of that day. She made a rapid recovery.

In my opinion the patient's life was saved by the injection of ammonia, as, although consciousness did not return for a time, the beneficial effects of the injection were apparent by the immediate improvement of the circulation and respiration, and restoration of warmth to the whole body.

I am, Sir, yours faithfully,

Chippenham, Wilts, February, 1874. WM. FARRAGE, L.R.C.P.

A Staff Surgeon R.N. has not correctly interpreted the spirit of our remarks. We did not attribute the successful march of the sailors to the Prah *entirely* to the manner in which they were clad; but we suggested, as regards dress and equipment, that the loose attire of the sailor is a more suitable and comfortable dress than that of the soldier, notwithstanding the excellence of the uniform specially designed for the latter in this campaign. Our correspondent states:—"I had an opportunity of seeing a letter written by the staff surgeon in medical charge, and he accounts for the successful march by the great care which was exercised to relieve men at once who were either tired or foot-sore. An evening examination was made, not only of the blue-jackets, but also of the native carriers, and great attention was paid in the first instance to any indication of abrasion or sickness. The British blue-jacket is an individual who is well able to take care of himself under any circumstances; but he is not on that account the less an object of solicitude to his officers."

Dr. Thomson, (Plymouth.)—The work alluded to, it is believed, contains the latest information.

FIGHTING SHY.

AT a recent meeting of the Hartlepool Rural Sanitary Authority, Dr. Gourley, the medical officer, presented his annual report, from which we gather that the district under his charge is making fair progress towards a good sanitary condition. With reference to one locality, however, Dr. Gourley said that its drainage flowed into a stream supplying a reservoir, which was used ostensibly for manufacturing purposes only, but which was, nevertheless, the only source whence the hands employed at certain works were supplied with drinking-water. He had brought this fact under the notice of the Local Government Board, but the Board "had replied in a formal manner, and without offering any opinion or suggestion"—a result which has evidently surprised Dr. Gourley. He may take comfort in learning that to ask for bread and to receive a stone has been hitherto the ordinary issue of appeals to the Local Government Board for counsel in public health matters.

THE communication of *Dr. Thomas Inman* (Clifton) shall, if possible, appear next week.

A WARNING.

To the Editor of THE LANCET.

SIR,—Having had some years' experience of Government medical work in the West Indies, will you kindly permit me through your columns to caution young medical men who may be on the look out for colonial appointments against a too ready acceptance of public service in that part of the world.

It has lately come to my knowledge that the Governor of the Leeward Islands, of which Antigua is the chief, is at this moment endeavouring, through the Colonial Office, to induce medical practitioners to go out to that colony under a promise of Government patronage. The bait held out, however, is, I can assure my *confrères*, by no means attractive to a man possessing either ability, ambition, or a spark of independence. The salary offered by the Governor of the Leeward Islands to district medical officers is, I believe, £200 per annum, supplemented by the magnificent scale of fees given below. For this the doctor is to be the absolute servant of the Governor, to do his bidding at all times, and hold himself ready to carry out whatever instructions he may receive from the local Government (virtually a despotic one), his professional (?) duties varying perhaps from those of a nuisance inspector to the functions of a monthly nurse. Such being the *attractive* side of the West Indian medical service, I will now glance at the drawbacks to professional life in those colonies. The climate, however careful a man may be, has a decidedly enervating and weakening effect on the constitution, so that, as was the case with myself, though he may escape "yellow jack," ague, intermittents, &c., yet, after a few years' residence in the continued high temperature of a tropical climate, the system, if not recruited by change to a more bracing air, generally becomes permanently impaired. Living, unless the diet is entirely confined to native produce, is not as cheap as in England. It is absolutely necessary to keep one, frequently two horses; this entails at least an annual cost of from £30 to £50. House-rent would, at the lowest estimate, in the country absorb another £30, thus leaving a balance to rely on, out of the £200, of £140 or £120 for all the expenses of housekeeping, &c. And let not the sanguine medico delude himself with the idea of a fortune from private practice. The West Indies are no longer the El Dorado of enterprise they were in the days of slavery; since the emancipation money has been getting scarcer and scarcer, till now, with the exception of one or two tolerably well-to-do planters, the bulk of the upper classes are little better off than the "poor white folksey" of Mrs. Beecher Stowe. As to the negroes, they look to "buera" to supply all their wants free gratis for nothing, and seldom dream of paying a doctor.

Such being the brilliant prospects in store for those who may unwittingly offer themselves for this service, I will not trespass further on your valuable space beyond expressing a hope that, so far from medical men being found in this country ready to sell their hard-earned professional knowledge, to say nothing of health and energy, at so cheap a rate, they will rather join me in sincerely sympathising with our unfortunate brethren who, from circumstances beyond their control, are compelled for a mere pittance to spend the whole or best part of their lives in an unhealthy climate, cut off from much that makes life enjoyable in more favoured countries, working under a thankless and often oppressive Government for, as regards the many, an unappreciative and undeserving public.

Tariff of Medical Fees offered by the Governor of the Leward West Indian Islands to District Medical Officers.

A visit within a mile of practitioner's house	£0	2	0
A visit by night, special summons	0	3	0
A visit beyond a mile, extra per mile	0	0	8
Advice at practitioner's house	0	1	0
Midwfery per each case	0	10	0
Midwifery, instrumental extra	0	10	0
Extraction of teeth and minor operations at dispensary	0	1	0
Treatment of compound fracture of thigh	1	0	0
Treatment of compound dislocation of leg	1	0	0
Amputation of leg, arm, foot, or hand	1	0	0
Operation for strangulated hernia	1	0	0
Simple fracture or dislocation of thigh or leg	0	16	0
Minor amputations	0	10	0
Treatment of dislocations or fractures of arm	0	7	6
Hydrocele, palliative operation	0	4	0
Hydrocele, radical operation	0	7	6
Paracentesis abdominis	0	5	0

Yours obediently,

London, Feb. 16th, 1874. ONE WHO HAS BEEN VICTIMISED.

M. G. F.—The situation is one of some delicacy, which should have been avoided if it could have been anticipated. Still we cannot see that by acting as a friend on occasion, and as a *locum tenens* for a few days, our correspondent should forego his right of practising in a large town.

A Medical Officer of Health is referred to the Report on Filters in THE LANCET of 1867.

X. Y. Z. may obtain the work of Messrs. Macmillan, the publishers.

"AVENGING FLODDEN."

A CORRESPONDENT of *Notes and Queries* reminds us of the anecdote in Lockhart's Life of Scott, setting forth how Sir Walter, when travelling on the English side of the Border, had occasion to send for a medical man in the case of one of his domestics who had been taken suddenly ill. Scott was surprised, on the appearance of the medico, to recognise in him an old man who had been a farrier in Ashestiel. After questioning him on his therapeutics, and remonstrating that he must have killed a few of his patients, the *ci-devant* farrier replied, "Ou aye, may be sae, whiles they dee and whiles no; but it's the will o' Providence. Ony how, your Honour, it wad be lang before it maks up for Floddon." Capping this story, the correspondent of *Notes and Queries* extracts the following from a history of the ancient Aberdonian family of Skene, a century antecedent to Sir Walter's birth:—"The two doctors of physic, the one Professor of the College of St. Andrews, the other the first Professor of Medicine at Aberdeen, were upon their coming from France fallen short of money at London, had only a quarteen by them, and, resolving to kill or cure wherever they come, were heard to say, one to the other: 'Let us spend this, and then revenge Pinkie and Flodden'; and being arraigned before the King, King James preferred the one to be his ordinary, the other his extraordinary doctor, and recommended them to St. Andrews and Aberdeen for the love he bore to Sir John Skene, his brother."

Mr. J. W. Taylor.—Next week.

HYDROPHOBIA AND RABIES.

To the Editor of THE LANCET.

SIR,—In your journal of Feb. 14th I accidentally noticed a correspondence on two subjects in which I take some interest.

One is hydrophobia. I go farther than my friend Mr. Berkeley. I believe there is no such disease; that it is merely neurotic, like the mania of the dancing dervishers or the mediæval flagellants. I have been bitten by many dogs, but never dreamt of cautery. The last time I was seriously bitten was by a white Newfoundland dog of Sir William Clayton's, at Harleyford, and then cautery was suggested. I laughed at the idea. I hold hydrophobia to be a purely mental malady. A man may go mad; an inferior animal cannot.

A few weeks ago there died in this village an old man, named Leonard Keys. He was about eighty-four years of age. In his youth he was a servant-boy at Bear-place, which belongs to the Ximenes family. A dog, presumed to be mad, bit a large number of the servants, Keys being one. They were sent to Southampton in post-chaises to be dipped in sea-water, that being thought a remedy. None of them went mad that I could hear of; but to the day of his death Keys would go miles round to cross the Thames by a bridge, avoiding the ferries. Was this hatred of water a creation of his fancy, or was it hydrophobia? That he would drink water (with an infusion of brandy) I know well.

The other topic which struck me was the story of Sophia R—— and the needle. My maternal grandmother, when she was about the age of Mr. Bates's patient, accidentally swallowed a needle. It gave rise to no trouble for half a century; but when, so far as I can judge, she was about seventy, she suffered terrible pain in the arm. It was thought to be rheumatic; but it proved to be the movement of the long-lost needle, which, after torturing her for months, made its way down the arm, and came out through the thumb. I think it worth while to mention this, since possibly Sophia R——'s needle may in the same way be attempting to force egress.

Yours, &c.,

Knowl Hill, Berks, Feb. 23rd, 1874. MORTIMER COLLINS.

To the Editor of THE LANCET.

SIR,—After the very long letter in your last impression from the pen of Mr. Fleming, Veterinary Surgeon, of the Royal Engineers, I only request you to permit me to say that he utterly misrepresents me, interlarding his discourse with little else than personalities. To personalities in a matter that deeply concerns the welfare of the human race I will not condescend.

Yours faithfully,

Poole, Feb. 23rd, 1874. GRANTLEY F. BERKELEY.

*** This correspondence must end here.—ED. L.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I trust you will allow me, through the medium of your columns, to suggest to my brother medical officers that we should make some endeavour to better our circumstances.

The new Warrant is extremely unpopular with all classes of army medical officers, and has been productive of no good result whatever; whilst it has succeeded in doing what certain members of the late Ministry seemed to take an especial pride in—viz., harassing and worrying all who have come under its operation. The abolition of the regimental system has put numbers to great pecuniary loss and inconvenience; they have now no settled home, as formerly, but are knocked about from station to station in the most annoying way. The new regulation as regards forage is extremely unjust, and a distinct breach of faith. I believe the only argument brought forward in favour of the new Warrant is, that it is more economical; but even allowing that to be the case, it is more than counterbalanced by the universal discontent which pervades all ranks of army medical officers. As a proof that I have not exaggerated facts, I need only refer to the innumerable complaints heard on all sides, and to the number of medical officers going on half-pay and retiring. Medical officers have lost all confidence in the power of the Director-General to aid them, and should therefore endeavour to aid themselves by drawing up a petition, and obtaining the signatures of all medical officers who consider themselves aggrieved. The Department is at present very much under-officered, owing to the cutting-down policy practised during the past few years, no officer having been admitted since March, 1872. It is very easy to show a reduction in expenditure by such means; but should the feeling at present existing among the profession continue, it is very likely to cause a serious difficulty before long, as many will leave the army in disgust, and be the means of preventing others from entering.

Yours truly,

February, 1874. ARMY SURGEON.

MR. LOWE AND THE VACCINATION LAWS.

The Rev. William Hume Rothery.—We are obliged to our correspondent for a copy of the correspondence between him and the Government on the subject of an alleged undertaking on the part of Mr. Lowe to repeal the Vaccination Laws. But we must be excused for not publishing the correspondence. Mr. Lowe, if we mistake not, at his recent election took the trouble to deny the purpose attributed to him; and even had he not done so, whatever his faults, he has done nothing to justify the opinion that he could be guilty of such a retrograde piece of legislation.

THE WEBB FUND.

THE following contributions have been received by Mr. Augustus Churchill, the Treasurer, to the 25th inst.:—

	£	s.	d.
Dr. Peter Hood	5	5	0
Mr. T. R. Wheeler	3	3	0
Mr. Copland...	1	1	0
Mr. Hinton	1	1	0
Mr. W. Martin	1	1	0
Mr. R. Quain	5	5	0
Dr. Burder	2	0	0
A Widow's Mite	5	0	0
Messrs. Savory & Moore ...	5	5	0
Dr. George Johnson	2	2	0
Dr. Headlam Greenhow ...	2	2	0
Mr. Howard Marsh	2	2	0
Mr. Maunder	5	5	0
Mr. H. Morris	1	1	0
Mr. W. Harvey	1	1	0
Mr. Durham...	10	10	0
Mrs. Wing	10	0	0
A Friend	£6	0	0
Inspector-General Parratt .	2	2	0
S. L.	3	3	0
Mr. T. H. Clarke...	2	2	0
Mr. J. Scovell Adams ...	5	5	0
Mr. T. J. Hodgson	3	3	0
Mr. W. Hancock	5	5	0
Dr. Parratt	1	1	0
Mr. H. Bullock	2	2	0
Dr. Robertson	2	2	0
	95	9	0
Amount previously acknowledged	1201	6	6
Total	£1296	15	6

Cardnus, (Plymouth.)—Arthur Johnston, the celebrated author of the translation of the Psalms into Latin elegiacs, graduated as M.D. at Padua in 1610. His previous education had been carried on at Marischal College, Aberdeen, in which county he was born. In 1628, three years after his return from the Continent, he was appointed Physician to Charles I., and spent most of his time in London.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir G. Burrows, London; Sir Henry Thompson, London; Dr. Thorowgood, London; Prof. Maclean, Netley; Mr. Henry Lee, London; Dr. Richardson, London; Dr. Palfrey, London; Dr. Morell Mackenzie, London; Dr. Peacock, London; Prof. Cameron, Dublin; Mr. T. Bryant, London; Dr. Brewer, Dalston; Mr. Hunting, London; Mr. Hutchinson, Vienna; Mr. Weaver, Longton; Mr. Morgan, London; Mr. Manby, East Rudham; Dr. Groves; Mr. Stevenson, London; Mr. Festing, Bath; Dr. Whitmore, London; Rev. Hume Rothery; Mrs. Allen, London; Dr. Taylor, Scarborough; Surgeon-Major Gore; Dr. Wiltshire, London; Mr. Joyce, Cranbrook; Mr. Poole, London; Dr. Barness, London; Messrs. Arnold and Sons, London; Mr. Jones, Wales; Mr. Warren; Dr. Maurice Evans, Cardiff; Messrs. Coxeter and Son, London; Surgeon-Major Rowe; Mr. C. Rayne, Oxford; Messrs. Jolly and Son, Bath; Mr. Kerman, London; Dr. Quinlan, Dublin; Dr. Jay, Chippenham; Mr. Young, London; Dr. Winn, London; Mr. Dingle, London; Mr. Annis, Great Dunmow, Essex; Dr. Sam. Gee, London; Mr. Blease, Altrincham; Dr. Harvey, Aberdeen; Mr. Miller, Edinburgh; The Hon. Grantley F. Berkeley, Poole; Mr. Ricketts, Liverpool; Dr. Gramshaw, Stillington; Dr. Griffiths, Dublin; Mr. Seymour, Coventry; Mr. Spencer, East Moulsey; Mr. Dearden, Halifax; Mr. Hardie, Manchester; Mrs. Gregory, Nottingham; Dr. Godfrey, Connahs Quay; Dr. Thomson, Plymouth; Mr. Thomas, Milford Haven; Mr. Leeman, Chipping Sodbury; Mr. W. Reeves, London; Mr. Farragh, Chippenham; Mr. Collins, Knowl Hill; Mr. Toyne, Sheffield; Mr. Davison, Newburn; Dr. Smith, Woodley; Mr. Mason, Carlisle; Dr. Turnbull, Devonport; Mr. Orwen, Dudley; Dr. Waters, Liverpool; Dr. Wightman, Ackworth; Dr. Rayner, Solihull; Mr. Adey, Kidsgrove; Mr. Crofts, Dover; Dr. Buck, Worcester; Mr. Clarke, Huddersfield; Mr. Whitmarsh, Hackney; Dr. Gill, Dover; Mr. Procter, Shifnal; Mr. Bond, Bromwich; Mr. Williams, Liverpool; Mr. Hooker, Croydon; Mr. Poyntz, Bolton-le-Moors; Mr. Bower, Aberdeen; Mr. Macleod, Galston; Mr. Godrich, London; Major Upton, Hastings; Mr. Sewill, London; Mr. Ker, Cradley Heath; Dr. Darcy, Ryde; Mr. Muriel, Norwich; Miss Blake, Horsham; Mr. Clegg, Bolton; Mr. Shott, Wallingford; Mr. Harris, Hackney; Dr. Jotham, Kidderminster; Dr. Scott, Dublin; Mr. W. Jones, Liverpool; Mr. Fox, Bristol; Mr. Ostler, Bradford; Mr. Macpherson, Chichester; Dr. Strange, Shrewsbury; Mr. Wells, Hampton; Mr. Marsden, Eastbourne; Mr. Wiglesworth, Ashford; Mr. Smith, Hunslet; Mr. Dixie, Stowmarket; Mr. Fosbery, Coleshill; Mr. Perrin, Manchester; Mr. Nuttall, Bradford; Mr. Tate, Woodbridge; Dr. Cook, Manningtree; Dr. Wilders, Birmingham; Mr. Le Fenore, Jersey; Dr. Watson, Newbury; Mr. Marsland, Barnsbury; Dr. Satchell, Kew; Mr. Ewart, Cheetham Hill; Mr. G. Field, London; Mr. Crockett, Merthyr Tydfil; Dr. Popham, Nottingham; Mr. Harrison, Liverpool; The Secretary of the Harveian Society; Royal Institution; A Public Vaccinator; The Registrar of the College of Physicians; W. H.; Emigrant; A Fifteen Years' Subscriber, Hull; L.R.C.P. Edin.; Enquirer; M.R.C.P. Edin.; A Medical Officer of Health; An Intending Candidate; Medicus, Manchester; &c. &c.

Drawing-Room Gazette, East London Observer, Newcastle Daily Chronicle, Carlisle Express and Examiner, Colonist, Surrey Advertiser, Metropolitan, Lincoln Gazette, Cork Constitution, Huddersfield Chronicle, Chemists' and Druggists' Advocate, Welshman, Sunday Times, Liverpool Daily Post, Hastings and St. Leonards Chronicle, Isle of Man Times, Scotsman, and *Western Morning News* have been received.

Medical Diary of the Week.

Monday, March 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. W. K. Parker, "On the Structure and Development of the Skull in the Vertebrata."
MEDICAL SOCIETY OF LONDON.—7 P.M. General Meeting for the Election of Officers and Council. — 8 P.M. Clinical Meeting: Mr. Francis Mason, "On Nasal Polypi." — Mr. Arthur E. Durham, "On some Cases of Foreign Bodies removed from the Urethra."—And other communications from Dr. F. T. Roberts, Mr. Victor de Méric, Mr. Henry Smith, and Mr. Royes Bell.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY. — 8 P.M. Annual Meeting. — Address of the President, Dr. C. J. B. Williams.
ODONTOLOGICAL SOCIETY. — 8 P.M. Casual communications; President's Address; Conversazione.
SOCIAL SCIENCE ASSOCIATION. — 8 P.M. Dr. Charles Slarimpton, "On Hospitals, Cottage Hospitals, and Ventilation."

Tuesday, March 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On the Physical Properties of Liquids and Gases."
PATHOLOGICAL SOCIETY OF LONDON. — 8 P.M. Mr. De Morgan will open a Discussion on "Cancer."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Extraordinary Meeting for Legislation, &c.

Wednesday, March 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. W. K. Parker, "On the Structure and Development of the Skull in the Vertebrata."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Payne, "On the Origin and Relations of New Growths."
OBSTETRICAL SOCIETY OF LONDON. — 8 P.M. Resolution concerning the Admission of Women. — Dr. Wiltshire will show a new guarded Perforator.—Discussion on Dr. Playfair's paper "On Puerperal Thrombosis." —Dr. Copeman, of Norwich, "On Consultation Midwifery in Private Practice."—And other communications.
ROYAL MICROSCOPICAL SOCIETY. — 8 P.M. Mr. Alfred Sanders: "Contribution towards a Knowledge of Appendicularia."

Thursday, March 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Prof. W. C. Williamson, "On Cryptogamic Vegetation: Ferns and Mosses."
HARVEIAN SOCIETY OF LONDON.—7½ P.M. Council Meeting.—8 P.M. Dr. Farquharson, "On the Effects of continued Physical Exertion on the Heart and Large Vessels."

Friday, March 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. W. K. Parker, "On the Structure and Development of the Skull in the Vertebrata."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Payne, "On the Origin and Relations of New Growths."
ROYAL INSTITUTION.—8 P.M. Weekly Evening Meeting.—9 P.M. Sir Samuel Baker: "Suppression of the Slave Trade of the White Nile."

Saturday, March 7.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. Bosworth Smith, "On Mohammed and Mohammedanism."